# **OpenMSU** Initiative

## **Recommendation Phase Final Report**

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This final report summarizes the deliverables of the Recommendation Phase Subcommittee: a model for intaking, evaluating, and prioritizing proposed solutions to identified problems; a portfolio of recommended solutions; and an ongoing model to sustain the process for continuous improvement.

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## **OpenMSU Recommendation Phase Executive Summary**

The Recommendation Phase of the OpenMSU initiative began on July 2, 2102 and concluded November 9. The purpose of this phase was to:

- Identify the problems discovered through information gathering activities
- Apply subject matter expertise to ascertain solutions
- Solicit input into problems and potential solutions
- Evaluate and prioritize proposed solutions
- Recommend solutions

The deliverables for this phase of the initiative were met by the Recommendation Subcommittee within the allotted timeframe approved by the Steering Committee and Executive Sponsors:

A model for intaking, evaluating, and prioritizing solutions for the current phase and ongoing

A model for intaking, evaluating, and prioritizing solutions was adopted based on industry-recognized portfolio management standards and refined for use at MSU, presented in Appendix C.

Recommendations for proposed solutions

Ten proposed solutions were initiated, developed, evaluated, voted on at an Open Forum and prioritized. They are presented on the following page in the Portfolio Dashboard and detailed in the body of the report. Additional solutions were also generated at the Open Forum and taken into consideration.

The Recommendation Subcommittee reviewed a range of information sources:

- Service Provider and Service Customer surveys
- Focus groups
- Proposed solution summaries
- Proposed solution detailed narratives and cost-benefit analyses
- Website feedback
- Open Forum feedback

• Evaluation team scoring of proposed solutions (provided in the portfolio dashboard on the following page) The Recommendation Subcommittee presented its findings to the OpenMSU Steering Committee, who developed the recommendations that are summarized in the OpenMSU Roadmap included in the Executive Summary and Conclusion sections of this report.

**Note Regarding Recommendations and the Portfolio Dashboard** The independent evaluation team rated the proposed solutions, which generated the portfolio dashboard provided to the steering committee and included in the report. The steering committee used that information as one of several inputs in determining their recommendations. The most cost-effective solution is not automatically the best path to long-term success. Long-term success for OpenMSU requires foundational solutions that in themselves are not necessarily cost-effective but are necessary investments to a successful path, on which the rest of the solutions depend. Hence they were recommended as the first steps in the roadmap in spite of seemingly lower cost-effectiveness in and of themselves.

## Portfolio Dashboard

The Evaluation Team evaluated and scored all proposed solutions with the results illustrated below. All proposed solutions were evaluated predicated leadership commitment and fully resourcing the project. Without commitment or adequate resources and funding, probability of success changes dramatically, changing evaluation results.

			BIGGEST	PROBABILITY	HORIZONTAL	PROCESS /		
PROPOSAL	💌 ID 🛛 💌		BANG 💌	OF SUCCES	PROBLEM 🗾	SERVICE 🗾	RECOMMENDATION	•
Upper Admin. Evaluation	UAE	0%	0%	0%	Other	<b>Employee Relations</b>	Return to Discovery	
BPA Process Improvement	BPA	50%	80%	75%	Multiple	Multiple	Evaluate Further	
Customer Service	CS	0%	0%	0%	Multiple	Majority	Return to Discovery	
Elim Paper	EDM	80%	90%	85%	Majority	Majority	Implement	
Finance Reporting	FR	0%	0%	0%	Redundancy	Majority	Return to Discovery	
Front End Accounting	FEA	65%	0%	0%	Other	Multiple	Return to Discovery	
HRPI: EPAF	HRE	60%	75%	80%	Multiple	EPAF/payroll	Implement	
HRPI: Payroll	HRP	65%	70%	70%	Multiple	EPAF/payroll	Implement	
HRPI: Recruiting/Hiring	HRR	65%	75%	55%	Multiple	HR Recruiting	Evaluate Further	
Purchasing	PUR	35%	70%	55%	Multiple	Purchasing	Monitor	
Shared Services Model	SSM	100%	10%	10%	Majority	Majority	Evaluate Further	
SP Development	SPD	80%	80%	70%	Multiple	Majority	Implement	
SP Staffing/Turnover	SPS	100%	100%	5%	Majority	Majority	Evaluate Further	



The Evaluation Team reviewed the dashboard's graphical illustration of the scoring results and concluded:

- Many proposed solutions have similar cost-effectiveness (bang for the buck) results, which includes time and effort savings. That is valid; these are solutions widely expected to improve efficiencies.
- Most proposed solutions are clustered in the Implement quadrant, having high alignment and probability of success. That is valid; these solutions were generated from institutional knowledge and expertise.
- Those that had low alignment typically had narrow impact on a relatively low number of people.
- Those that had low probability of success do need to be evaluated further.

The Evaluation Team affirmed the portfolio dashboard as a valid illustration of their intent. Explanations of the results are provided on the following page.

## **Explanation of Portfolio Dashboard Results**

- 1. Implement
  - a. Eliminate paper (Electronic Document Management and Workflow [EDMW])
  - b. HR Process Improvement: EPAFs. This proposed solution is *contingent on* prior implementation of EDMW.
  - c. HR Process Improvement: Payroll. This proposed solution is *contingent on* the project team determining whether outside resources are needed, utilizing internal resources as much as possible and external consultants as a last resort.
  - d. Service Provider Development. This proposed solution is *contingent on* collaboration between the project/advisory team and the training organization in HR. Assuming full commitment of HR, probability of success is high.
- 2. Evaluate Further
  - a. BPA Process Improvement. This proposed solution is dependent on a functional interface to Banner as well as EDMW. The functional interface to Banner could be a front-end accounting system or other interface improvement.
  - b. HR Process Improvement: Recruiting. This proposed solution did not have sufficient probability of success to implement without further evaluation. Implementation would be dependent on a project team determining the need for external assistance and on central/distributed collaboration. Probability of software improving the process is undetermined.
  - c. Shared Services model. This proposed solution is fundamental to other solutions just as EDMW is. It will only work if carefully and correctly designed and planned. A project team must be assigned to investigate and design this program carefully and thoroughly and report frequently to OpenMSU program management. This model needs to be adapted to different unit needs and ensure the balance of embedded customer service and central expertise.
  - Service Provider Staffing/Turnover. Success of this proposed solution is dependent on OCHE/BOR approval of salary adjustments, beyond the control of a project team. Probability of success is too low to proceed.
- 3. Return to Discovery (need more information)
  - a. Upper Administration Evaluation. Needs clarification of scope and intent. Prioritize at the next gate.
  - b. Customer Service. This proposed solution is a key idea, a set of foundational practices fundamental to OpenMSU. Could be implemented in conjunction with EDMW as a transformational change. Needs to be treated as a program and move into Discovery for additional information and development. Prioritize at the next gate.
  - c. Finance Reporting. Needs further development to determine scope, alternatives, and costs. Prioritize at the next gate.
  - d. Front-end Accounting. Needs further development to determine scope, alternatives, and costs. Prioritize at the next gate.
- 4. Monitor
  - a. Purchasing. Alignment of this proposed solution is low because a relatively small number of people deal directly with purchasing frustrations; it is a narrow solution. Probability of success is low because much of the frustration is related to state laws which process improvements will not address.

## OpenMSU Roadmap: Building From the Ground Up



## 1 Build the Foundation

The root causes of the frustration and inefficiency must be solved before the symptoms can be cured. Shared Services, Electronic Document Management and Workflow, and a Customer Service Culture solve the root causes. They are broad-scale, critical to long-term success, and challenging to implement.

Critical Success Factor: Qualified, high-performing project teams reporting frequently to program management.

- 1. Create a project team for each foundational piece consisting of well-qualified, high-performing individuals who work well together to carefully investigate, design, and vet the solution.
- 2. Assign a part-time, experienced project manager to lead each team, reporting to program management.
- 3. Establish a full-time, experienced program manager to oversee and guide the teams, ensure the foundational pieces all work together, report to executive sponsors, communicate with stakeholders.

## 2 Lay the Cornerstones

Solutions to process frustrations and inefficiencies are dependent on the foundation and certain cornerstones. Until those pieces are in place the processes can't get fixed. The cornerstones can begin in parallel with foundational work.

HR-Recruitment/Hiring includes classification of positions. This is the most commonly expressed pain point in focus groups that absorbs a lot of HR time, and is facing an increase of volume in the central office. Anticipated software purchase will automate tasks but not address root-cause practices. Problems here can be addressed in parallel with foundational pieces for quick demonstrated wins.

**Critical Success Factors:** Qualified guidance and collaboration between central and distributed HR, Accounting, Training functions.

- 4. Create a project team for each cornerstone consisting of well-qualified contributors from central and distributed contributors in HR, Accounting, and contributors who can speak to training needs and solutions.
- 5. Assign a project lead for each cornerstone, reporting to program management oversight.
- 6. Charge the team with evaluating needs and designing solutions, utilizing expert resources as needed.

## 3 Fix Process Pains

HR-Payroll and HR-EPAFs were specific processes noted as frustrating and inefficient that were prioritized in the Implement quadrant. These are dependent on, and will change based on, the foundation pieces being in place and to some extent the cornerstone pieces.

**Critical Success Factors:** Shared services, electronic document management and workflow, and a culture of customer service, training, and front-end to Banner must be in place. The recruitment/hiring time-sink must be reduced for capacity to invest in these processes.

- 7. Communicate to service providers and service customers that these processes are dependent on the foundation and cornerstones.
- 8. Continually report progress on foundation and cornerstones to assure constituents that progress is being made and these processes will be addressed.

## 4 Add Finish Work

Banner Payment Authorization and Purchasing processes were evaluated as lower in alignment because they are narrow in scope, affecting relatively few service providers and customers. Purchasing has low probability of success in addressing frustrations because much of the process is driven by law. Both processes are dependent on Electronic Document Management and Workflow and a Front End to Banner; both will change based on Shared Services Model; both are related to Service Provider Development. Both are less widely felt than HR-Payroll, HR-EPAF, and HR-Recruitment/Hiring.

Critical Success Factors: Foundation and cornerstone pieces must be in place.

- 9. Include purchasing and BPA contributors in the foundation and cornerstone project teams.
- 10. Call a Summit of primary purchasing players to collaborate on a purchasing organization based on foundation and cornerstones to identify and implement early wins and build future wins.

## **Cost Estimates**

The following preliminary cost estimates are Rough Order of Magnitude (ROM) estimates, typically +/-50%, with a confidence rating below 50%. To achieve a 90% confidence rating the ROM range should be extended to +/- 150%. Cost estimate details are available in Appendix H.

PROJECT	UPFRONT REAL COST	UPFRONT T&E COST	ONGOING REAL COST	ONGOING T&E COST		
Shared Services Model	95,000		110,000			
Electronic DocMgt Wrkflow	309,000	15,300		239,000		
Customer Service Culture	39,300	24,700		8,800		
HR Recruitment/Hiring	7,200	8,600				
Front End to Banner	Undetermined, proposed solution still in concept stage.					
Service Provdr Developmnt						
HR Payroll	14,400	17,300				
HR EPAF		20,700				
Banner Payment Authorztn		20,700				
Purchasing		Minimal				

ated Timeline					
This timeline represents gross estimates of time prior to planning and design, which will inform the actual schedule. Timeline assumes reasonable and adequate resources are allocated. Lack of resources will lengthen timeline.		Planning and Design Ir	Planning and Design Banner Payment Authoriza	Planning and Design Implementation	
		HR EPAF Process  Planning and Design Implementation Evaluation Transition to Ope HR Payroll Process  HR Payroll Process			
Planning and Design Impleme Service Provider Development	ntation Evaluation Trans	ition to Operatio	ns		
Discovery App	roval Planning a	nd Design	Pilot Implementation	Implementation	s 2 through n
Planning and Design HR Recruitment/Hiring	Implementation	Evaluation	Transition to Operations		
Planning and Design Customer Service Culture	Implementation	Evaluation	Transition to Operations		
Planning and Design Shared Services Model	Pilot Implementat	ion	Implementations 2 through	n	
Planning and Design Electronic Doc Mgt Workflow	Pilot Implementat	ion	Implementations 2 through	n	
1/1/2013		1	/1/2014		12/31

## **OpenMSU Recommendation Phase Report Detail**

The mission of the OpenMSU Initiative is to empower staff and faculty to optimize mission support success through long-term, sustainable changes based on thorough data collection and campus input. It can be summed up as a long-term effort to improve work efficiency and job satisfaction. Specific goals are to:

- Enrich Service Providers
- Satisfy Service Customers
- Increase Efficiency
- Improve Effectiveness

#### Introduction

The Recommendation Phase of the OpenMSU initiative began on July 2, 2102 and concluded November 9. The purpose of this phase was to:

- Identify the problems discovered through information gathering activities
- Apply subject matter expertise to ascertain solutions
- Solicit input into problems and potential solutions
- Evaluate and prioritize proposed solutions
- Recommend solutions

The Recommendations Subcommittee (see Appendix A) was charged with designing and executing the phase in a constituent-inclusive manner.

The deliverables for this phase are provided within this report:

DELIVERABLE	REPORT SECTION
Model for intaking, evaluating, and prioritizing solutions for the current phase and ongoing	Methodology
Recommendations for solutions to design	Portfolio of Recommendations

## Methodology

The Recommendation Subcommittee was charged with the following expectations:

- 1. Review surveys and other sources of information to determine sources of inefficiency and frustration.
- 2. Create a model for evaluating solutions according to prioritization criteria.
- 3. Propose solutions as Subject Matter Experts (SMEs) and in conjunction with other SMEs.
- 4. Solicit feedback, communicate and publish process and progress for transparency.

Each charge was executed as described in the following sections.

#### 1. Review information

The subcommittee began by reviewing the Service Provider and Service Customer survey results to identify the greatest pain points expressed by both the staff providing services and the staff consuming services. The pain points were categorized as being Horizontal, Vertical, or Process related, defined as:

- Horizontal: The most notable issues that cut across the organization, manifesting in multiple locations and processes.
- Vertical: The functional areas of the organization where improvements would be felt most notably.
- Process: The processes of the organization that most notably encounter the issues as work flows through the organization.

#### **Categorized Pain Points**

HORIZONTAL	VERTICAL	PROCESS
<ul> <li>Paper-based processes, redundancy/duplication, lack of integration, manual processing, overall processes</li> <li>Overwhelmed staff miss details</li> <li>Lack of customer service and individualized attention</li> <li>Lack of communication, coordination, training</li> <li>Central-distributed model</li> <li>Funding and prioritization</li> <li>Compensation</li> <li>Lack of IT resources, governance and vision</li> </ul>	<ul> <li>Human Resources</li> <li>Finance</li> <li>Purchasing</li> <li>Information Technology</li> </ul>	<ul> <li>Recruitment</li> <li>Payroll</li> <li>Banner payment</li> <li>Purchasing</li> </ul>

#### 2. Create a model

The Recommendation Subcommittee designed a model for evaluating and prioritizing proposed solutions, leveraging the model created for the MSU Integration Initiative, which was adopted from industry-recognized portfolio management standards. The industry portfolio management model consists of process, tools, teams, and techniques and is presented in Appendix C.

For purposes of OpenMSU, the Recommendation Subcommittee:

- 1. Reviewed the problems identified in the surveys and focus groups.
- 2. Applied institutional knowledge and professional expertise to propose solutions.
- 3. Summarized proposed solutions as a business case with cost-benefit-risk-alignment information.
- 4. Assigned an independent team to evaluate proposed solutions against a defined rubric.
- 5. Plotted the proposed solutions in a dashboard of recommendation quadrants.

The **prioritization criteria** consisted of a cost-benefit-risk criteria using more user-friendly terminology for common consumption:

- Alignment (including benefit to institution and constituents as well as alignment to overarching objectives of improved work efficiency and job satisfaction)
- Probability of success (expressing risk mitigation in positive terms)
- Biggest bang for the buck (expressing cost-effectiveness more intuitively)

Detailed business cases with cost-benefit (ROI) analysis where warranted for each proposed solution are provided in Appendix H.

The evaluation rubric is provided in Appendix G.

### 3. Propose solutions

After reviewing the Service Provider and Service Customer surveys and ranking the pain points, the Recommendation Subcommittee proposed solutions to the identified problems as well as collected proposed solutions from other Subject Matter Experts and constituents through direct solicitation, web-solicited feedback, and an Open Forum.

Ten proposed solutions were developed and prioritized, listed below. See Appendix H for detailed information on original proposed solutions including the business case, supplemental narrative, and cost-benefit analysis where applicable.

Three additional solutions were proposed through the Open Forum and do not yet have detailed business cases.

#### Banner Payment Authorization Process Improvement (Original Proposed Solution)

**Problem Statement:** The BPA process had the second most survey comments for an activity that took significantly longer than it should at MSU, and it was tied for the most comments as the process most critical to change and/or streamline. The current BPA process involves duplicate entry of data and physical movement of forms. About 36,750 BPA forms were processed in FY2011, which is a high volume of transactions at MSU.

- The current BPA process involves duplicate entry of data and physical movement of forms as discussed in the following:
- Data is entered onto BPA forms by departmental staff (often using programs such as Microsoft Access or other software such as the Facilities project accounting software)
- BPA forms are then printed out and manually delivered to UBS
- UBS then enters this data into the Banner system

**Proposed Solution:** Redesign the BPA process through the use of electronic document management & workflow technology, including elimination of unnecessary paper and manual processes. This solution is dependent on implementation of the Document Management and Workflow solution (EDMW).

#### **Possible Alternatives:**

- Redesign the BPA process without automating it.
- Implement shared services to provide BPA support to multiple units.
- Hire an external consultant to evaluate the process and develop potential improvements.

#### Creating a Culture of Customer Service (Original Proposed Solution)

**Problem Statement:** According to the OpenMSU surveys there is significant campus demand for improved customer service from administrative and technical functions at MSU.

**Proposed Solution:** Implement a culture of customer service throughout administrative support functions. Assign a cross-functional project team to attend the Disney Institute's program on quality service to "develop an organizational culture that supports consistent delivery of quality service" and bring those strategies to MSU.

#### **Possible Alternatives:**

- Use an alternative customer service training program. This alternative received a high number of votes at the Open Forum.
- Implement a customer service culture without a training program.

#### Eliminate Paper-based and Manual Processes (Original Proposed Solution)

**Problem Statement:** Paper-based processes are inherently less efficient than automated processes, can negatively impact customer service and generate costs associated with creating, storing and retrieving paper

documents. Paper-based processes negatively affect customer service due to the time lag associated with processing them. Paper-based processes require workgroup proximity to physical files, impacting organizational space requirements and impeding the university's ability to focus the campus core on student-centric services. Paper-based processes also impede four-campus integration as records cannot be easily shared across campuses.

**Proposed Solution:** Assign a project team to assess, design, and implement Electronic Document Management and Workflow (EDMW) functionality to replace many of the current paper-based approvals and notifications currently performed manually by staff. Electronic document management allows documents to be filed and processed as an electronic image. Workflow is a tool for automating and simplifying administrative processes.

#### HR Process Improvement: Electronic Personnel Action Form (Original Proposed Solution)

**Problem Statement:** According to the OpenMSU surveys, there is significant campus demand for improved HR processes, ranking fourth in survey comments as the process most critical to improve. Responsibility for conducting this process has been shifted from central to distributed service providers in recent years. According to distributed service providers involved in OpenMSU focus groups, this shifting of duties appears to have led to process inefficiencies.

**Proposed Solution:** Assign a qualified project team of relevant stakeholders, including central and distributed service providers, to analyze the EPAF process. The project should include analysis of staffing and distribution of labor and duties involved, potentially changing personnel responsibilities as needed, and should incorporate workflow technology to address process issues.

#### **Possible Alternatives:**

- Conduct an EPAF organizational improvement project without automating it through the use of workflow technology.
- Include EPAF processing in a shared services center pilot to provide EPAF support to multiple units. This
  alternative received a high number of votes at the Open Forum.

#### HR Process Improvement: Payroll (Original Proposed Solution)

**Problem Statement:** According to the OpenMSU surveys, there is significant campus demand for improved payroll processes.

**Proposed Solution:** Assign a project team of stakeholders, including central and distributed service providers, to work with an external consultant to analyze and improve payroll processes. An external consultant is recommended because HR processes are complex and we do not have the staff capacity or expertise to adequately redesign HR processes.

#### **Possible Alternatives:**

Conduct a payroll process improvement project without the assistance of an external consultant. This
alternative received a high number of votes at the Open Forum.

#### HR Process Improvement: Recruitment and Hiring (Original Proposed Solution)

**Problem Statement:** According to the OpenMSU surveys, there is significant campus demand for improved recruiting/hiring processes. Eight out of twelve units participating in OpenMSU focus groups commented on recruiting/hiring processes as needing improvement.

Although purchase of applicant tracking software is underway, technology enhancements must be accompanied by process improvements to be effective.

**Proposed Solution:** Assign a project team of stakeholders, including central and distributed service providers, to work with an external consultant to analyze and improve recruiting and hiring processes from classification through onboarding. An external consultant is recommended because HR processes are inherently complex and because MSU does not currently have the staff capacity or expertise to adequately redesign HR processes.

#### **Possible Alternatives:**

 Conduct a recruiting/hiring process improvement project without the assistance of an external consultant. This alternative received a high number of votes at the Open Forum.

#### Purchasing Process Improvement (Original Proposed Solution)

**Problem Statement:** The OpenMSU Service Provider Survey indicates dissatisfaction with purchases that flow through the central office in three main areas:

- Paper-based systems
- Compliance-driven rather than value-add
- Personnel and staffing issues, including differing interpretations of law, policy, procedure, and preference

**Proposed Solution:** Assign a cross-functional project team to assess and design new purchasing processes. Hold a purchasing summit to collaborate on processes and organizational structure, including appropriate staffing level. Implement electronic workflow to alleviate paper-based delays.

#### **Possible Alternatives:**

 Incorporate purchasing functions into shared services model for improved efficiency, specialized expertise, communication and coordination.

#### Shared Services Model (Original Proposed Solution)

**Problem Statement:** Administration is highly decentralized, with units independently covering a range of duplicate functions. Unit-embedded functional support provides customer-centric knowledge at a cost of institutional inefficiencies and organizational risk. Disparate software systems burden limited IT resources with duplication.

- Functional services are fragmented across departments creating challenges with training, coordination, communication, equitable allocation and overwhelmed staff. Lack of backup staff degrades service during absences and turnover and compounds risk.
- Distributed specialist expertise is under-utilized by central offices.
- Generalist staff report satisfaction with task variety, customers report satisfaction with embedded support, and space is not available to centralize; however, better balance can be achieved between centralized versus decentralized design.

**Proposed Solution:** Assign a project team of distributed and central stakeholders to build a Distributed Shared Services model based on best practices and lessons learned from other institutions: Create an administrative shared services center in A&F to support interested smaller units, funded by seed money and unit contributions. Build the center over time as attrition occurs and units opt in. Integrate distributed functional specialists with central functional specialists by defining workflows, roles and responsibilities to leverage their expertise, better load-balance across existing resources, and reduce the bottlenecks in central offices.

#### **Possible Alternatives:**

Implement a shared service center among multiple units without a reporting line to Administration and Finance. This alternative received a high number of votes at the Open Forum.

#### Service Provider Development (Original Proposed Solution)

**Problem Statement:** MSU does not have a means to ensure that service providers are getting the training they need, to track that training has been received, to assess that the right training is being provided or to ensure it is of adequate quality.

Although some departments provide training on functional responsibilities for distributed service providers, much of it is only provided a few times of year, and some functions provide none.

There are few training and professional development programs available to support a high-performance culture, such as training in performance management and in using metrics to manage unit performance.

**Proposed Solution:** Implement a Professional Development and Training organization as part of the HR Office as proposed by the Chief Human Resources Officer. Assign a project team to assist in the development of this organization as it would apply to service providers for OpenMSU functions: finance & accounting, HR, IT, purchasing, sponsored programs administration and Web development and content management.

#### **Possible Alternatives:**

 Establish an administrative council of central and distributed staff to guide operations such as training, staffing, standardized processes.

#### Service Provider Staffing and Turnover (Original Proposed Solution)

**Problem Statement:** According to CUPA and O\*net benchmarks, MSU staff are significantly underpaid. Certain central functions, such as the HR Office, University Business Services and the Information Technology Center as well as distributed administrative functions, experience high rates of turnover because of issues such as low pay and heavy workloads.

High turnover costs the institution time and effort in training new hires and adversely affects customer satisfaction and efficiency.

**Proposed Solution:** Assign a project team of qualified staff working with external consultants as needed to develop a long-range staffing plan for functional areas across the university, including a classification and compensation review with researched salary information to verify or establish new norms for salary basis consistent with the goals of the MSU strategic plan.

#### **Possible Alternatives:**

- Establish an administrative council of central and distributed staff to guide operations such as training, staffing, standardized processes. This alternative received a high number of votes at the Open Forum.
- Shared services model may reduce workload and better load balance across available resources.

#### **Upper Administrator Evaluation (Open Forum Concept)**

**Problem Statement:** Faculty are regularly evaluated by their students. This allows faculty to identify improvement opportunities and adjust their teaching style accordingly. Upper level administrators are only evaluated by their supervisors, not those they supervise. Therefore, they do not have the opportunity to adjust their administrative approach.

**Proposed Solution:** A project team will regularly provide anonymous surveys of upper level administration to the employees that work directly below them. This is especially important during an administrator's first year in a new position. The evaluators will be encouraged to only provide positive feedback.

#### **Possible Alternatives:**

 Allow employees to provide feedback to upper level administration at annual open discussions conducted by each individual unit.

#### Financial Reporting Improvement (Open Forum Concept)

**Problem Statement:** The current report web, SAIS, is outdated. SAIS is also not user-friendly, which makes it difficult for employees to perform their daily work.

**Proposed Solution:** Assign a project team to select and implement a web-based ad-hoc reporting tool to replace SAIS. The team should work directly with those who use SAIS to determine the best replacement tool and to accommodate individual unit needs.

#### **Possible Alternatives:**

Hire an external consultant to evaluate the current report web and develop potential improvements.

#### Front End Accounting System (Open Forum Concept)

**Problem Statement:** CatBooks is currently the front end accounting system that almost all departments use to create BPAs and reconcile their Banner accounts, not to mention provide reports to department heads, deans, directors, and PIs. However, there are several departments who use alternative systems. MSU needs a standard system that does all this and more.

**Proposed Solution:** Assign a project team to determine and implement a permanent front end accounting system that meets the needs of departments.

#### **Possible Alternatives:**

 Hire an external consultant to analyze the current accounting needs of departments and suggest a system to implement.

#### 4. Solicit feedback and communicate progress

The Recommendation Subcommittee solicited feedback on original proposed solutions and also solicited new proposed solutions through multiple channels:

- In-person meetings with Subject Matter Experts
- An Open Forum interactive poster session (see Appendix J for Open Forum comments and Appendix L for participation photos)
- Web site feedback (see Appendix K)

#### **Open Forum Voting**

Over 65 people participated in the Open Forum, casting votes for proposed solutions, commenting on proposed solutions, and submitting new solutions. The table below shows the tally of votes for proposed solutions or their alternative solutions.

Proposed Solutions and		
Alternatives	Detail	# Votes
ВРА	BPA Process Improvement	48
	Customer Service Improvement	
Customer Service	Disney Institute	53
	Customer Service Different	
Customer Service Alternative 1	Customer Training Program	11
	Customer Service No Customer	
Customer Service Alternative 2	Training Program	4
	Eliminate Paper-based Processes	
Elim Paper	(Electronic Doc Mgt Workflow)	119
HR Process Improvement - EPAF	Electronic Personnel Action Form	73
HRPI-EPAF Alternative 2	HRPI-EPAF With Shared Services	10
HR Process Improvement -	Payroll Process Improvement	
Payroll	with External Consultant	32
	HRPI-Payroll No External	
HRPI-Payroll Alternative 1	Consultant	46
HR Process Improvement -	Recruitment and Hiring Process	
Recruitment Hire	Improvement	27
	HRPI-RecHire No External	
HRPI-RecHire Alternative 1	Consultant	53
Purchasing	Purchasing Process Improvement	39
	Purchasing Process Improvement	
Purchasing Alternative 1	With Shared Services	1
1	Shared Services Model with	
Shared Services Model	reporting line to A&F	31
	Shared Services Model without	
Shared Services Alternative 1	reporting line to A&F	10
	Central department responsible	
Service Provider Development	for service provider development	51
	SP Development with	
SP Development Alternative 1	Administrative Council	2
Service Provider Staffing and	Evaluate and solve staffing,	_
Turnover	salary, and turnover issues	80
	Solve staffing, salary, turnover	
SP-Staffing Turnover Alternative 1	with Administrative Council	5

The same vote tally graphically illustrated appears below:



#### **Communicating Progress**

The subcommittee worked with the initiative communications team to provide information throughout the phase. The most effective communication channels are in-person presentation at standing meetings. The first half of the phase fell in the summer months when standing meetings were not available to engage. The subcommittee prepared the website platform during the summer months and engaged constituents as soon as the Fall semester was underway.

The website located at www.montana.edu/openmsu/recommendations published:

- Sub-committee page providing contact information of committee members for constituents to communicate with in person
- Subject Matter Experts page listing the SMEs for each functional area
- Information Gathering page explaining how information was gathered and providing information gathering team contact information
- Findings page summarizing the information and pain points gleaned from the service provider and service customer surveys
- Progress page providing the approved timeline, deadlines, and monthly status reports
- Proposals page listing and describing all the initial proposed solutions
- Evaluation committee page providing contact information for the evaluation team
- Prioritization model pages providing individual pages for:
  - □ Prioritization overview, explanation, and resources
  - Proposal template for constituents to suggest new proposals and understand how proposals are defined
  - $\hfill\square$  The rubric by which proposed solutions are evaluated
  - □ An example of the portfolio model that charts prioritization of evaluated solutions
  - □ The list of guiding principles used to evaluate proposals
- Communications page providing a means to request an in-person presentation and listing the in-person presentations conducted after Fall semester was underway:
  - Budget Council
  - □ Subject Matter Experts
  - □ HR Representatives
  - □ Faculty Senate
  - OSP Roundtable
  - D President's Executive Council
  - □ Staff Senate
  - □ SuperUsers
  - □ University Council

## Portfolio of Recommendations

As described in the Methodology section, a portfolio dashboard was created to summarize and chart the evaluation results of the proposed solutions, presented below.

## **Portfolio Dashboard**

			BIGGEST	PROBABILITY	HORIZONTAL	PROCESS /		
PROPOSAL	💌 ID 🛛 💌		BANG 🗾	OF SUCCES	PROBLEM 🗾	SERVICE	RECOMMENDATION	-
Upper Admin. Evaluation	UAE	0%	0%	0%	Other	Employee Relations	Return to Discovery	
BPA Process Improvement	BPA	50%	80%	75%	Multiple	Multiple	Evaluate Further	
Customer Service	CS	0%	0%	0%	Multiple	Majority	Return to Discovery	
Elim Paper	EDM	80%	90%	85%	Majority	Majority	Implement	
Finance Reporting	FR	0%	0%	0%	Redundancy	Majority	Return to Discovery	
Front End Accounting	FEA	65%	0%	0%	Other	Multiple	Return to Discovery	
HRPI: EPAF	HRE	60%	75%	80%	Multiple	EPAF/payroll	Implement	
HRPI: Payroll	HRP	65%	70%	70%	Multiple	EPAF/payroll	Implement	
HRPI: Recruiting/Hiring	HRR	65%	75%	55%	Multiple	HR Recruiting	Evaluate Further	
Purchasing	PUR	35%	70%	55%	Multiple	Purchasing	Monitor	
Shared Services Model	SSM	100%	10%	10%	Majority	Majority	Evaluate Further	
SP Development	SPD	80%	80%	70%	Multiple	Majority	Implement	
SP Staffing/Turnover	SPS	100%	100%	5%	Majority	Majority	Evaluate Further	



## OpenMSU Roadmap: Building From the Ground Up



## **1 Build the Foundation**

The root causes of the frustration and inefficiency must be solved before the symptoms can be cured. Shared Services, Electronic Document Management and Workflow, and a Customer Service Culture solve the root causes. They are broad-scale, critical to long-term success, and challenging to implement.

Critical Success Factor: Qualified, high-performing project teams reporting frequently to program management.

- 1. Create a project team for each foundational piece consisting of well-qualified, high-performing individuals who work well together to carefully investigate, design, and vet the solution.
- 2. Assign a part-time, experienced project manager to lead each team, reporting to program management.
- 3. Establish a full-time, experienced program manager to oversee and guide the teams, ensure the foundational pieces all work together, report to executive sponsors, communicate with stakeholders.

## 2 Lay the Cornerstones

Solutions to process frustrations and inefficiencies are dependent on the foundation and certain cornerstones. Until those pieces are in place the processes can't get fixed. The cornerstones can begin in parallel with foundational work.

HR-Recruitment/Hiring includes classification of positions. This is the most commonly expressed pain point in focus groups that absorbs a lot of HR time, and is facing an increase of volume in the central office. Anticipated software purchase will automate tasks but not address root-cause practices. Problems here can be addressed in parallel with foundational pieces for quick demonstrated wins.

**Critical Success Factors:** Qualified guidance and collaboration between central and distributed HR, Accounting, Training functions.

- 4. Create a project team for each cornerstone consisting of well-qualified contributors from central and distributed contributors in HR, Accounting, and contributors who can speak to training needs and solutions.
- 5. Assign a project lead for each cornerstone, reporting to program management oversight.
- 6. Charge the team with evaluating needs and designing solutions, utilizing expert resources as needed.

## 3 Fix Process Pains

HR-Payroll and HR-EPAFs were specific processes noted as frustrating and inefficient that were prioritized in the Implement quadrant. These are dependent on, and will change based on, the foundation pieces being in place and to some extent the cornerstone pieces.

**Critical Success Factors:** Shared services, electronic document management and workflow, and a culture of customer service, training, and front-end to Banner must be in place. The recruitment/hiring time-sink must be reduced for capacity to invest in these processes.

- 7. Communicate to service providers and service customers that these processes are dependent on the foundation and cornerstones.
- 8. Continually report progress on foundation and cornerstones to assure constituents that progress is being made and these processes will be addressed.

## 4 Add Finish Work

Banner Payment Authorization and Purchasing processes were evaluated as lower in alignment because they are narrow in scope, affecting relatively few service providers and customers. Purchasing has low probability of success in addressing frustrations because much of the process is driven by law. Both processes are dependent on Electronic Document Management and Workflow and a Front End to Banner; both will change based on Shared Services Model; both are related to Service Provider Development. Both are less widely felt than HR-Payroll, HR-EPAF, and HR-Recruitment/Hiring.

Critical Success Factors: Foundation and cornerstone pieces must be in place.

- 9. Include purchasing and BPA contributors in the foundation and cornerstone project teams.
- 10. Call a Summit of primary purchasing players to collaborate on a purchasing organization based on foundation and cornerstones to identify and implement early wins and build future wins.

## **Cost Estimates**

The following preliminary cost estimates are Rough Order of Magnitude (ROM) estimates, typically +/-50%, with a confidence rating below 50%. To achieve a 90% confidence rating the ROM range should be extended to +/- 150%. Cost estimate details are available in Appendix H.

PROJECT	UPFRONT REAL COST	UPFRONT T&E COST	ONGOING REAL COST	ONGOING T&E COST
Shared Services Model	95,000		110,000	
Electronic DocMgt Wrkflow	309,000	15,300		239,000
Customer Service Culture	39,300	24,700		8,800
HR Recruitment/Hiring	7,200	8,600		
Front End to Banner	Undetermined, prop	osed solution still in c	concept stage.	
Service Provdr Developmnt				
HR Payroll	14,400	17,300		
HR EPAF		20,700		
Banner Payment Authorztn		20,700		
Purchasing		Minimal		

ated Timeline					
This timeline represents gross estimates of time prior to planning and design, which will inform the actual schedule. Timeline assumes reasonable and adequate resources are allocated. Lack of resources will lengthen timeline.		0	Planning and Design Banner Payment Authoriz	Implementation and Purchasi	
		<ul> <li>Planning and Design Implementation Evaluation Transition to HR EPAF Process</li> <li>Planning and Design Implementation Evaluation Transition to HR Payroll Process</li> </ul>			
Planning and Design Im Service Provider Develop Discovery Front End to Banner	plementation Evaluation Transition ment Approval Planning and I	on to Operatio Design	ns Pilot Implementation	Implementatior	ns 2 through n
Planning and Desig HR Recruitment/Hiring	n Implementation	Evaluation	Transition to Operations		
Planning and Design Customer Service Culture	n Implementation e	Evaluation	Transition to Operations		
Planning and Design Shared Services Model	n Pilot Implementation	L	Implementations 2 through	n	
Planning and Design Electronic Doc Mgt Work	n Pilot Implementation		Implementations 2 through	n	
1/1/2013		1	/1/2014		12/31

## Appendices

## Appendix A: Bibliography of Portfolio Management Sources

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## Appendix B: Committee Members

### **Recommendations Subcommittee**

The role of the Recommendations Subcommittee was to design and lead this phase of the initiative, functioning as a program management team according to the portfolio management model.

Anne Milkovich, Chair	Director of Business Administration, ITC
Susan Alt	Employee Relations Officer
Laura Humberger	Asst VP of Finance
Lynn Marlow	Accounting Associate
Sandy Sward	Director, Office of Sponsored Programs
Daniel Adams, Attaché	Director, Institutional Audit & Advisory Services

### **Evaluation Team**

The role of the Evaluation Team was to evaluate proposed solution statements. Members represented a range of departments and positions across the university to provide breadth of experience and were individually selected for their respected expertise and ability to contribute to the process meaningfully and objectively.

Tricia Cook	Fiscal Director, Office of Sponsored Programs
David Court	Finance Banner Team Lead
Adam Edelman	Chief Security Officer
Carmen Fike	Business Officer-BS, CRA
lan Godwin	Director, Administration & Finance
Becky McMillan	Personnel Officer

## **Information Gathering Team**

The role of the Information Gathering Team was to gather, analyze, and report information to ensure a datadriven and valid process.

Daniel Adams	Director, Institutional Audit and Advising Services
Ila Saunders	Senior Auditor
Molly Martin	Industrial Engineering Student

### Information Gathering Subject Matter Experts

The role of the Information Gathering Team Subject Matter Experts was to provide detailed information about the functional area they represented, to contribute new proposed solutions, and to give expert feedback on existing proposed solutions.

	Dave Court, Finance Module Team Leader
Finance and Accounting	Laura Humberger, Assistant Vice President for Financial Services
	Lynn Marlow, Acct. Assoc. IV, College of Education, Health and Human Development
	Kim Rehm, Asst. Director Finance & Administration, Extended University
Human Resources	Janell Barber, HR Officer, Human Resources   Affirmative Action
	Kerry Evans, Personnel Officer, Facilities Services
	Paul Lindsay, HR Module Team Leader
	Sharon Stoneberger, HR Officer, Human Resources
Information Technology	Rod Laakso, Supervisor, Help Desk and Computer Operations, IT Center
monnation reciniology	Pol Llovet, Associate Director of Cyberinfrastructure Research Computing Group

	<ul> <li>Matt Rognlie, IT Systems Coordinator, College of Agriculture/Montana AES</li> </ul>
Purchasing	Dave Court, Finance Module Team Leader
Turchasing	<ul> <li>Mary Lou Wilson, Administrative Officer, Auxiliary Services</li> </ul>
Sponsored Programs	<ul> <li>Jeralyn Brodowy, Assistant Director of Administration, Western Transportation Institute</li> </ul>
Administration	Traci Miyakawa, Fiscal Manager, Office of Sponsored Programs
Web Development and	<ul> <li>Jake Dolan, Director, MSU Web Communications</li> </ul>
Content Management	Levi Baker, Computer Software Engineer, Auxiliary Services

## Appendix C: Portfolio Management Model

The portfolio management model consists of process, tools, teams, and techniques.

#### **Portfolio Management Process**

The portfolio management process has the following stages:



- 1. The Concept stage generates and submits ideas as potential solutions to a business problem. If the concept looks promising at face value, it is given clearance to go into Discovery.
- 2. The Discovery stage investigates the concept and summarizes a cost-benefit-risk assessment as a business case. Discovery can involve considerable work and is not conducted unless the concept has passed the Concept Clearance gate.
- 3. Business cases are evaluated and prioritized at the Prioritization gate. Approved cases move into planning based on priority and resource availability, including program manager, project manager and sponsor.
- 4. The Plan stage involves detailed design, project planning, and resource allocation.
- 5. When project plans pass the Plan Approval gate, they move into the project Execution stage.
- 6. Completed projects are transitioned into operations as standard procedure.

The Recommendation Phase of OpenMSU involved the first part of the process, referred to as portfolio intake.

The prioritization gate re-occurs regularly, meaning that portfolio contents (e.g. projects, programs, or initiatives) are continually re-evaluated and can be re-prioritized at any time, resulting in projects being expedited, shelved or abandoned as business needs change.

Typically in a portfolio management framework, a Program Management Office (PMO) supports and oversees portfolio intake, facilitates prioritization, monitors execution to ensure intended benefits are realized and institutional risk is managed, reports results and communicates with stakeholders.

#### Portfolio Management Tools

The tools to identify solutions consist of prioritization criteria, a cost-benefit analysis, an evaluation rubric, and a portfolio dashboard.

The **prioritization criteria** consisted of cost-benefit-risk criteria using more user-friendly terminology for common consumption:

- Alignment (including benefit to institution and constituents as well as alignment to overarching objectives of improved work efficiency and job satisfaction)
- Probability of success (expressing risk mitigation in positive terms)
- Biggest bang for the buck (expressing cost-effectiveness more intuitively)

A **business case template** was created to summarize each proposed solution in a common format with sufficient information to inform the decisions about alignment, probability of success, and biggest bang for the buck criteria (see Appendix E).

A **cost-benefit analysis** template was used to provide a more detailed assessemnt return on investment. Prior to detailed design and planning, costs can only be assessed on a Rough Order of Magnitude (ROM) basis of typically +/- 50% (see Appendix F).

An **evaluation rubric** was developed to evaluate the business case of each proposed solution, rating the solution on alignment, probability of success, and biggest bang for the buck (see Appendix G) using a standard set of factors for each.

A **portfolio dashboard** was developed to provide a visual representation of the evaluation outcome. In this dashboard the evaluated proposed solutions are displayed in a bubble chart where the X axis illustrates probability of success, the Y axis illustrates alignment to goals, and the bubble size illustrates biggest bang for the buck. A big bubble in the upper right quadrant indicates an obvious win, with high alignment, strong probability of success, and big bang for the buck. Those can be expedited into planning as obvious wins; all other solutions must be prioritized and recommended according to their placement on the chart.



#### **Portfolio Management Teams**

The teams used in this model consisted of a program management team, communications team, information gathering team, evaluation team, and project teams.

Throughout the intake process, the Recommendations Subcommittee and Steering Committee chairs functioned as a **program management team**. Their responsibility was to oversee the phase and ensure that intended benefits were realized. They also functioned as the individual contributors and subject matter experts. In those functions they:

- Designed the phase and defined the deliverables
- Managed the schedule
- Evaluated information
- Identified and ranked problems
- Applied expert judgment to ideate solutions
- Communicated with stakeholders and constituents
- Solicited input into existing proposed solutions as well as ideas for new proposed solutions

- Assigned an independent evaluation team to evaluate solutions
- Reported to the primary stakeholders, the steering committee and chairs

A **communications team** was assigned by the Steering Committee to support the Recommendations Subcommittee with constituent communication on a broad scale. The Recommendations Subcommittee developed the content for the website and in-person meetings, and provided content to the communications team for broad-scale messaging to constituents and detailed updates to the Steering Committee chairs for communications with executive sponsors.

The **information gathering team** (see Appendix A) that was convened prior to the Recommendations Phase continued to operate in this phase, conducting additional analyses, gathering information from focus groups, and providing cost-benefit analysis.

The Recommendations Subcommittee assembled an independent **evaluation team** (see Appendix A) of respected mission-support experts across the university to evaluate each business case using the predefined rubric and arrive at a consensus scoring for each proposed solution. Because the Recommendations Subcommittee was also acting as subject matter experts generating solutions to problems, an independent evaluation team was important to ensure objectivity in the evaluation of proposed solutions.

The evaluation team:

- Read through each proposed solution summary and supporting detail
- Reviewed feedback from constituents participating in the Open Forum, including alternative and new proposals
- Convened as a team to discuss all proposed solutions, contributing breadth and depth of expert knowledge
- Arrived at a consensus scoring for each proposed solution

The Recommendations Subcommittee will also recommend project teams as part of the next OpenMSU phase and ongoing model. Project teams consist of a qualified project manager, project sponsor, and individual contributors. A program manager oversees multiple project teams to ensure progress, risk management, and realization of intended benefits.

#### **Portfolio Management Techniques**

The techniques used in the model are woven throughout the process, tools, and team responsibilities, summarized as:

- Defined and documented process that can be explained to constituents for transparency
- Portfolio intake that captures ideas and requests for solutions
- Discovery that collects data on size and complexity of the solution for informed prioritization
- Stage-gating, to check on progress before approving each subsequent stage, effectively managing risk
- Cost-benefit-risk-alignment assessment
- Rubric-based evaluation
- Prioritization based on defined criteria
- Portfolio dashboard
- Program management
- Communications planning
- Data-driven solutions
- Independent evaluation with consensus scoring

All of these techniques are elements of industry-standardized portfolio management that balances institutional benefits and risk and that manages projects and programs to ensure realization of intended benefits.

## Appendix D: Post Phase Evaluation

Throughout this phase, issues were encountered and resolved, including the impacts of new leadership at the university and refinement of various techniques used in the model.

#### **New leadership**

In the months before and during the Recommendation Phase, new leaders took over the Human Resource department and the Information Technology department, both of which were vertical areas identified through the surveys. New leadership began addressing the problems noted. For example, the new CHRO re-organized the HR department to include a central point of coordination and responsibility for training and professional development, a noted pain point. The new CIO re-organized the IT department with new leadership, vision for the future, and governance, all identified pain points. Proposed solutions had already been identified for these pain points that the new leaders were busily implementing in parallel.

The Recommendations Subcommittee discussed how to handle this situation and decided to continue recommending the proposed solutions although they were already in progress, for several reasons:

- They were, in fact, still recommendations of OpenMSU regardless of who else might be recommending and implementing them.
- OpenMSU's job was in part to speak for the people and state their opinions and needs regardless of where else solutions might arise.
- Lending OpenMSU's voice in support of the improvements could add momentum and weight to their urgency.
- Data and solutions provided by OpenMSU may support and benefit the goals of the initiatives begun by the new leadership.

The Recommendation Subcommittee therefore decided to complete the process to develop, evaluate, and prioritize the proposed solutions that were already in progress under new leadership.

#### **Cost-Benefit Analysis**

Midway through the Recommendations Phase, President Cruzado indicated that she would like to see Return-on-Investment analysis as part of prioritization to inform final recommendations. While cost-effectiveness and benefit analysis were included in the business cases, true accounting ROI cannot be reasonably calculated until solutions have been designed and planned; however, the Information Gathering Team resolved this issue by preparing cost-benefit analyses based on Rough Order of Magnitude (ROM) estimation for proposed solutions where sufficient data was available to do so.

#### **Evaluation Techniques**

Different techniques for evaluating proposed solutions were considered, namely a Delphi technique of independent analysis iteratively compared and compiled into a single consensus and a collective discussion technique of talking through each proposed solution as a group and arriving at a single consensus.

The Evaluation team resolved this issue by selecting the collective discussion technique that worked well for everyone. Talking through the various perspectives and collectively considering the wealth of information available added a dimension of quality expertise to the exercise that otherwise would have been lost.

The rubric template developed for the Evaluation exercise proved to be too granular, calling for ratings of several factors in each of the three prioritization criteria categories (Alignment, Cost-effectiveness, Probability of Success) then computing those factors into a single category rating. Given the variety of proposed solutions, a single predetermined set of factors did not capture all the information and perspective applicable to each proposed solution. Had the evaluation activity been entirely quantifiable, computers could have conducted the evaluation. The fact that humans were required was precisely due to the need for expert judgment in addition to quantifiable criteria. At the same time, some measure of control needed to be applied to ensure consistency in the evaluation activity.

The Evaluation Team resolved this issue by refining the method and template. In the refined method, the factors within each category are considered and a single rating is given for the category, rather than individual ratings for each factor that compute into a single rating. This allowed for better discussion and application of expert judgment that was valid but not necessarily accounted for using a single set of pre-determined factors for a variety of cases. This rubric style also matches common rubrics used in evaluating student performance, and so was deemed acceptable as a solution.

### **Recommendation Phase Lessons Learned**

Lessons learned included both positive aspects that should be learned from and repeated and negative aspects that should be learned from and improved on.

#### Lessons to Repeat

- Leveraging the work of the MSU Integration Initiative saved time in developing the model for evaluation and prioritization of proposed solutions.
- Having a small phase subcommittee enabled faster progress than expecting the entire Steering Committee to drive the phase.
- The Recommendations Subcommittee contributed varied background and worked well together. Different perspectives were shared and considered and decisions were arrived at consensually.
- Regular meetings between the Recommendations Subcommittee chair and the Steering Committee chair and Information Gathering team lead kept the initiative on track and collaborative.
- The Evaluation Team contributed varied background and worked well together. The team members took their role seriously and contributed valuable input and perspective.
- Having an objective and independent Evaluation Team added a richer dimension and better decision making than the Recommendations Subcommittee could have done, being too close to the process.
- The Open Forum was successful, with positive feedback on the posters and the sticker voting and feedback mechanisms.
- The web site provided comprehensive information and feedback mechanisms, although it was not as well published as it could have been (see Negative Lessons to Improve).

#### Lessons to Improve

LESSON LEARNED	DETAILS AND RECOMMENDED IMPROVEMENTS				
Communication was inadequate, as is typical on almost any initiative	<ul> <li>During the summer months communication is especially challenged without Monday Morning Memos, standing committees to visit, or regular MSU Today postings.</li> </ul>				
	<ul> <li>Summer channels need to be designed and utilized.</li> </ul>				
	<ul> <li>The responsibility for communication was shared among many people, with sometimes unclear responsibilities.</li> </ul>				
	<ul> <li>Roles, responsibilities, and a formal communication plan should be developed and adhered to.</li> </ul>				
Website availability was not pushed as well as it could have been	<ul> <li>The web site contained a wealth of phase information but was not adequately pushed to constituents. Constituents indicated they were not aware the information was available.</li> </ul>				
	The web site should be pushed more to				

	constituents in communication planning.
	<ul> <li>Some information on the web site was hard to locate, which was not reported in a timely fashion to web development.</li> </ul>
	<ul> <li>Testers should be identified to test the web site and provide feedback when information is hard to find or understand.</li> </ul>
Communication between Executive Sponsors and the Recommendations Subcommittee came through multiple	<ul> <li>Multiple communication channels resulted in conflicting information being relayed and unclear response to the concerns</li> </ul>
	<ul> <li>Direct communication should occur between Executive Sponsors and the working committee with regularly scheduled meetings appropriately spaced throughout the phase.</li> </ul>
Steering Committee members were not as well utilized as they could have been	<ul> <li>Steering Committee members were reported to and met on occasion but could have been better utilized for feedback and support.</li> </ul>
	<ul> <li>Incorporate Steering Committee members into the communications plan as a primary stakeholder.</li> </ul>
	<ul> <li>Draw on committee members for specific feedback and support roles, such as website testing.</li> </ul>
Subject Matter Experts were inadequately engaged	<ul> <li>Due to time constraints, SMEs were not as fully engaged and utilized as they could have been.</li> </ul>
	<ul> <li>Incorporate SMEs into the communications plan as a primary stakeholder.</li> </ul>
	Engage SMEs more frequently.
	<ul> <li>Draw on SMEs for specific feedback and support roles.</li> </ul>
	<ul> <li>Define expectations and communicate more regularly with SMEs to prevent disengagement</li> </ul>
Conflicting demands existed for a data- driven, constituent-inclusive process and	<ul> <li>Data-driven and constituent-inclusive processes are time consuming, in direct conflict with speed.</li> </ul>
speedy completion	Resolve conflicting expectations upfront.
	<ul> <li>Define the prioritization of data-drivenness, constituent-inclusiveness, and speedy completion for better management of expectations and on-the- fly decision making.</li> </ul>
	<ul> <li>Manage ongoing expectations with direct communication between executive sponsors and oversight roles.</li> </ul>
	<ul> <li>A large steering committee and numerous SMEs required additional time to communicate with and engage.</li> </ul>
	<ul> <li>If speedy completion is a higher priority than inclusiveness or data-drivenness, utilize a smaller steering committee and fewer players in general.</li> </ul>
	<ul> <li>If inclusiveness and data-drivenness are higher priorities than speed, accept the necessary time commitments.</li> </ul>
	<ul> <li>Contributors to this phase were volunteers contributing</li> </ul>

fragmented time in addition to their regular jobs who had subject matter expertise but not necessarily program management or business analysis expertise.
<ul> <li>Allocate dedicated resources for efforts of this magnitude</li> </ul>
<ul> <li>Realistically identify gaps in expertise and provision means to close the gaps.</li> </ul>

## Appendix E: Business Case Template

Enter Proposal Nam	ne	OpenMSU P	roposal	ST	AGE	[Select Stage]
PROPOSAL OVERVIE	W					
Primary Contact				Email		
Title/Department				Phone		
Problem Statement						
Proposed Solution						
Key Performance Indicators or Outcome Measures						
General Time & Effort Required						
Alternative Solutions						
ALIGNMENT						
Data Support	Surveys	<b>Focus</b>	Groups	Professio	onal Expe	rtise
Initiative Objectives	Correction	al Efficiency 🔛 Emplo	yee Satisfaction			
Departments Served	L Academic	Depts L Agence	ies L asing Central L	Fin & Acct Cent Sponsored Prog	tral grams	HR Central
Constituents Served	Service Us	ers<1001 oviders<1001	.00-500 🛄 > .00-500 🛄 >	>500 •500		
Problems Addressed	Paper pro	cess 🛄 Customer servi ncy 🛄 Staff expertise	ce 🛄 Central/D	ist model 🛄 Lac	k of inte cation/p	gration LComm/Coord
Processes / Services	📙 HR Recrui	iting 🛄 Purchasing		ort 🛄 Sponse	ored Prog	Jrams 🛄 Web Dev & Content
Addressed	<b>BPAs</b>	Budget/Finance	e 🛄 EPAFs/P	Payroll 🛄 IT Gov	ernance	Employee Relations
COST-EFFECTIVENE	SS	•			<u> </u>	
Upfront Real Cost		\$ -	Upt	ront 1&E Cost	\$	20,700
	-	\$ -		nual 1&E Cost	\$	-
Benefits	Cash Savi	ings Incr. Capacity	Estim	ated New Net	\$	409,000 *
		Cost-Effectiveness	Pating 0%	P	robabili	ty of Success Pating 0%
Angriment vatility	570	Cost-Endetiveness		F	obabili	, or ouccess rearing 0.70

## Appendix F: Cost-Benefit Analysis Template

QUALITATIVE BENEFITS		
Benefit		Additional Info
1		
2		
3		
4		
5		
6		
COSTS		
	Applicable	
	(Y. N	· · · · · · · · · · · · · · · · · · ·
	Probable,	Additional Info
	Possible)	
Upfront Real Costs		
Hardware Purchase		
Software Purchase		
Consulting Services		
Other:		
Upfront T&E Costs		
Functional		
Project Management		
Business Analysis		
Electronic Document & Workflow		
Training		
Other:		
Technical		
Development & Implementation		
Other:		
Ongoing Annual Real Costs		
Licensing		
Systems Maintenance: New positions (3)		
Other: Computer & Training		
Ongoing Annual T&E Costs		
Other:		

Project Name					C	COST-BENEFIT CASH FLOW			
DISCLAIMER: Conceptual cost-benefit analysis	s with an es	timation rang	ge between -xxº	% to +xx%.					
QUANTITATIVE BENEFITS									
	Rate/Hr	Hrs/Wk	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals	
Increased Revenue								\$0	
Materials Savings								\$0	
Increased Time & Effort (T&E) Capacity									
1			\$0	\$0	\$0	\$0	\$0	\$0	
2			\$0	\$0	\$0	\$0	\$0	\$0	
Totals			\$0	\$0	\$0	\$0	\$0	\$0	
COSTS									
	Rate/Hr	Total Hrs	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals	
Upfront Real Costs									
Hardware Purchase (input individual years)								\$0	
Software Purchase (input individual years)								\$0	
Consulting Services (input individual years)								\$0	
Other (input individual years)								\$0	
Upfront T&E Costs									
Functional									
Project Management			\$0					\$0	
Business Analysis			\$0					\$0	
Electronic Document and Workflow			\$0					\$0	
Training			\$0					\$0	
Other:			\$0					\$0	
Technical									
Development & Implementation			\$0					\$0	
Other:			\$0					\$0	
Ongoing Annual Real Costs									
Licensing			\$0	\$0	\$0	\$0	\$0	\$0	
Systems Maintenance: New positions			\$0	\$0	\$0	\$0	\$0	\$0	
Other: Computer & Training			\$0	\$0	\$0	\$0	\$0	\$0	
Ongoing Annual T&E Costs									
Other:									
Totals			\$0	\$0	\$0	\$0	\$0	\$0	
lotais	<u> </u>	<u> </u>	\$U	\$U	\$U	\$U	\$U		

Assumptions:
Project Name		COST-BENEFI	T CASH FLOW
DISCLAIMER: Conceptual cost-benefit analysis	with an estimation ra	nge between -30% to	+50%
QUANTITATIVE BENEFITS			
	5-Yr Totals w/o BPA	5-Yr Totals for BPA	5-Yr Totals w/ BPA
Increased Revenue	\$0	\$0	\$0
Materials Savings	\$0	\$0	\$0
Increased Time & Effort (T&E) Capacity			
1 Increased Distributed T&E Capacity	\$0	\$0	\$0
2 Increased Central T&E Capacity	\$0	\$0	\$0
3	\$0	\$0	\$0
4	\$0	\$0	\$0
Totals	\$0	\$0	\$0
COSTS			
	5-Yr Totals w/o BPA	5-Yr Totals for BPA	5-Yr Totals w/ BPA
Upfront Real Costs			
Hardware Purchase (input individual years)	\$0	\$0	\$0
Software Purchase (input individual years)	\$0	\$0	\$0
Consulting Services (input individual years)	\$0	\$0	\$0
Other (input individual years)	\$0	\$0	\$0
Upfront T&E Costs			
Functional			
Project Management	\$0	\$0	\$0
Business Analysis	\$0	\$0	\$0
Electronic Document and Workflow	\$0	\$0	\$0
Training	\$0	\$0	\$0
Other:	\$0	\$0	\$0
Technical			
Development & Implementation	\$0	\$0	\$0
Other:	\$0	\$0	\$0
Ongoing Annual Real Costs			
Licensing	\$0	\$0	\$0
Systems Maintenance: New positions (3)	\$0	\$0	\$0
Other: Computer (1) & Training (3)	\$0	\$0	\$0
Ongoing Annual T&E Costs			
Other:		\$0	\$0
Totals	\$0	\$0	\$0

	Project Name	•	COST-BENI	EFIT BOTTOM LINE
DISCLAIMER: Concept	ual cost-benefit ana	lysis with an estimat	ion range between -30	% to +50%.
PERFORMANCE ANA	ALYSIS (Values in t	his section reflect l	End of Period)	
Year	Annual Costs	Annual Benefits	Annual Cash Flow	Overall Cash Flow
1	\$0	\$0	\$0	\$0
2	\$0	\$0	\$0	\$0
3	\$0	\$0	\$0	\$0
4	\$0	\$0	\$0	\$0
5	\$0	\$0	\$0	\$0
Totals	\$0	\$0	\$0	\$0
SUMMARY				
DISCOUNT RATE (%) :	5%			
NET PV:	\$0.00			
IRR:	N/A for neg return			
<b>RR (Internal Rate of R</b> IRR is the internal rate of So, if the project pays for representing the initial in investment), an error will	eturn) f return based on the <i>i</i> r itself before the end vestment). If all of the result (i.e., #NUM!).	Annnual Cash Flow. IF of the first year, the IR Annual Cash Flows a	RR requires an initial invest R cannot be calculated ( re positive numbers (no a	stment (negative value). without a negative value apparent initial
Break-Even Analysis				
The purpose of Break-Ev calculated using the Brea	en Analysis is to disc ak-Even Ratio followed	over when the project d by the Break Even P	will pay for itself. The bre oint Formulas.	ak even point can be
In the following ratio form	iula, use the Annual a low is a positive numb	nd Overall Cash Flow per.	values from the Break-Ev	en Year, which is the first
year that Annual Cash F				
year that Annual Cash F		Appuel Cook Flou	Operall Cost Flow	
year that Annual Cash F	Break-Even Ratio =	Annual Cash Flow Annual	<u>- Overall Cash Flow</u> Cash Flow	

## Appendix G: Evaluation Rubric

Ente	r Proposal Na	ame	
REF	CATEGORY	FACTOR	METRIC VALUE
ALIGN	MENT		
A.1	Institutional:	Mission	Outcome aligns directly to support of MSU discovery, creativity, service mission.
A.2	Initiative:	Increased efficiency	Outcome results in optimized process, productivity, and throughput.
A.3	Initiative:	Improved satisfaction	Outcome results in improved employee job satisfaction.
A.4	Scope:	Horizontal problems	Outcome addresses all the identified horizontal problems of the organization
A.5	Scope:	Processes/services	Outcome addresses all the identified process or service problems
A.6	Scope:	Functional areas	Outcome addresses all of the functional area departments in the initiative scope
A.7	Constituents:	Constituent reach	Outcome directly addresses deepest identified constituent needs.
A.8	Constituents:	Constituent span	Outcome directly addresses needs of the widest number of constituents.
COST-	EFFECTIVENESS		
C.1	Cost:	Ongoing	Ongoing cost is minimal or none.
C.2	Cost:	Upfront	Upfront cost is minimal or none.
C.3	Fiscal:	Cost Savings	Outcome reduces cash outflow.
C.4	Functional:	Time Savings	Outcome reduces time on process.
C.5	Opportunity:	Resource Availability	Necessary FTE and other resources are available and underutilized.
C.6	Opportunity:	Alternatives Availability	Time & effort cannot be better spent on any possible alternative.
PROB	ABILITY OF SUCCE	SS	
P.1	Institutional:	Critical Success Factors	CSFs are achievable with a high probability of occurring easily.
P.2	Institutional:	Funding Availability	Upfront and ongoing funding is sufficient for the life of the project.
P.3	Institutional:	Cultural willingness	The institutional culture is ready and willing to adopt this solution over alternatives.
P.4	Planning:	Training	Training needed is minimal and has been adequately planned for.
P.5	Planning:	Measurement	Outcome performance is measurable and will be reported.
P.6	Planning:	Stakeholders	Stakeholders are identified; expectations are reasonable and manageable.
P.7	Scope:	Complexity	Complexity is minimal; scope is defined and manageable.
P.8	Sustainability:	Ongoing Support	Ongoing support needed is minimal or readily available at low cost.

## Appendix H: Proposed Solution Detail

## BPA

	OpenMSU	Proposal									
<b>Banner Payment A</b>	uthorization (BPA) Process	STAGE	Prioritization								
PROPOSAL OVERVI	EW										
Primary Contact	Laura Humberger	Email Ihumbe	erger@montana.edu								
Title/Department	Asst VP of Finance	Phone 406-99	4-4311								
Problem Statement	The current BPA process involves dupl 36,750 BPA forms were processed in BPA process had the second most su it should, tied with recruiting/hiring as t	current BPA process involves duplicate entry of data and physical movement of forms. About 750 BPA forms were processed in FY2011, which is a high volume of transactions at MSU. The A process had the second most survey comments for an activity that took significantly longer than hould, tied with recruiting/hiring as the process most critical to change and/or streamline.									
Proposed Solution	Redesign the BPA process through the technology, including elimination of un	design the BPA process through the use of electronic document management & workflow choices workflow choices and manual processes.									
Key Performance Indicators or Outcome Measures	Reduced time to process an invoice Reduced cost per invoice Employee satisfaction with ease of use Reduction of physical paper storage	Juced time to process an invoice Juced cost per invoice ployee satisfaction with ease of use Juction of physical paper storage									
General Time & Effort Required	MEDIUM. Dependent on implementation Exact figures to be determined upon C adoption management.	EDIUM. Dependent on implementation of Doc Management and Workflow. act figures to be determined upon Concept clearance. Moderate training, communication and loption management.									
Alternative Solutions	<ul> <li>Redesign the BPA process without at</li> <li>Implement shared services to provide</li> <li>Hire an external consultant to evaluat</li> </ul>	Redesign the BPA process without automating it. Implement shared services to provide BPA support to multiple units. Hire an external consultant to evaluate the process and develop potential improvements.									
ALIGNMENT											
Data Support	Surveys Focus Gro	ups 🗹 Professional Expe	ertise								
Initiative Objectives	Operational Efficiency Employee	Satisfaction									
Departments Served	<ul> <li>✓ Academic Depts</li> <li>✓ Agencies</li> <li>✓ IT Central</li> <li>✓ Purchasing</li> </ul>	Fin & Acct Central	<ul><li>HR Central</li><li>University Comm</li></ul>								
Constituents Served	✓ Service Users       <100	100-500     ✓ >500       100-500     ✓ >500									
Problems Addressed	Paper process       Customer service         Redundancy       Staff expertise	Central/Dist model Lack of inte	gration 🔽 Comm/Coord								
Processes / Services Addressed	HR Recruiting       Purchasing         BPAs       Budget/Finance	IT Support     Sponsored Prog       EPAFs/Payroll     IT Govern	grams 🗌 Web Dev & Content ance 🗌 Employee Relations								
COST-EFFECTIVENE	ESS										
DISCLAIMER: Conceptual	cost-benefit analysis with an estimati	on range between -30% to +50%									
Upfront Real Cost	* \$ -	Upfront T&E Cost \$	20,700								
Ongoing Annual Cost	* \$ - 0	Ingoing Annual T&E Cost \$	-								
Benefits	Cash Savings 🗹 Incr. Capacity	Estimated New Net \$	409,000 *								
COMMENTS AND RE											
Alignment Rating	50% Cost-Effectiveness Rat	ing 90% Probabili	ty of Success Rating 75%								
* Estimated new net resul and ongoing annual costs Processes and Inefficienc **This proposal is depend ***Probability of success i	t is dependent on implementation of ele associated with implementing this tech ies proposal. dant on a functional interface to Banner a is dependent on leadership commitmer	ectronic document management a nnology are captured in the Elimir as well as EDMW. nt & being fully resourced.	and workflow. Upfront real nate Paper-based								

- Reduce cycle times- reduce time to process an invoice.
- **Coordinate activities-** implement a process that improves coordination between central and distributed service providers.
- **Increase capacity-** implement processes that take less service provider time to create additional service provider capacity.
- **Improve allocation-** enable shared services, which can improve the allocation of services among MSU units, through an automated accounts payable process.
- Improve service provider satisfaction- meet campus demand for an improved BPA process.
- Improve service customer satisfaction- meet campus demand for improved finance & accounting processes.

#### **Supporting Data**

- In response to the OpenMSU Service Provider Survey:
  - 18% of responses (84 comments) commented that the BPA process was an activity that took significantly longer than it should at MSU. This was the second most comments for any activity in response to this question.
  - 12% of responses (45 comments) commented that the BPA process was the process most critical to change and/or streamline at MSU. This was tied (with recruiting/hiring) for the most comments for any process in response to this question.
- In response to the OpenMSU Service Customer Survey, 31 out of 80 process overall (take too long, too difficult, duplicate effort, paper/manual) themed comments were about the finance & accounting function.
- About 36,750 BPA forms were processed in FY2011, which is a high volume of transactions at MSU.

#### **Detailed Problem Statement**

According to the OpenMSU surveys (as can be seen in the supporting data section), there is significant campus demand for an improved BPA process.

The current BPA process involves duplicate entry of data and physical movement of forms as discussed in the following:

- Data is entered onto BPA forms by departmental staff (often using programs such as Microsoft Access or other software such as the Facilities project accounting software).
- BPA forms are then printed out and manually delivered to University Business Services (UBS),
- UBS then enters this data into the Banner system.

#### **Detailed Solution Statement**

Redesign the BPA process through the use of electronic document management & workflow technology, including elimination of unnecessary paper and manual processes. Automating the BPA process is dependent on implementation of the EDMW solution.

A BPA process redesign has high-impact improvement opportunities with high transaction volume and will address the significant campus demand for manual process elimination and improvement. The project team should be comprised of relevant stakeholders, including central and distributed service providers, to ensure proper design.

The project should also include a review, and if needed, a change in the duties of personnel and methods now used for preparing and/or authorizing and/or inputting documents into the Banner system. For example, larger departments with approval processes in place could choose to enter their own BPAs into Banner, attaching the imaged document for review by a central office, eliminating time and effort. Smaller departments could choose to use a different approach, such as having this work performed for them by the central office.

#### **Alternative Solutions**

- Redesign the BPA process without automating it.
- Implement shared services to provide BPA support to multiple units.
- Hire an external consultant to evaluate the process and develop potential improvements.

BPA Process	Improven	nent COST-BENEFIT SUMMARY		
DISCLAIMER: Conceptual cost-benefit analysis	s with an est	imation range between -30% to +50%.		
QUANTITATIVE BENEFITS				
	Applicable (Y, N Probable, Possible)	Additional Info		
Increased Revenue	N			
Materials Savings	Y	Paper, toner, ink. Storage space.		
Increased Labor Time & Effort (T&E) Capacity	Y			
1 Increased Distributed T&E Capacity		Eliminate physical movement of documents.		
2 Increased Central T&E Capacity		Eliminate physical movement of documents. Eliminate redundant data entry.		
QUALITATIVE BENEFITS				
Benefit		Additional Info		
1 Reduce cycle times		Reduce time to process an invoice.		
2 Coordinate activities		Implement a process that improves coordination between central and distributed service providers.		
3 Increase capacity		Implement processes that take less service provider time to create additional service provider capacity.		
4 Improve allocation		Enable shared services, which can improve the allocation of services among MSU units, through an automated accounts payable process.		
5 Improve service provider satisfaction		Meet campus demand for an improved BPA process.		
6 Improve service customer satisfaction		Meet campus demand for improved finance & accounting processes.		
COSTS				
	Applicable (Y, N Probable, Possible)	Additional Info		
Upfront Real Costs				
Hardware Purchase	N			
Software Purchase	N			
Consulting Services	N	Electronic document and workflow development led by MSU project leader (Banner MTL)		
Other:				
Upfront T&E Costs				
Functional	N			
Project Management	Ý V			
Electronic Decuments and Workflows	ř V	Electronic document and workflow development lod by MSU project leader (Banner MTL)		
Training	ř V			
Othor:	I			
Technical				
Development & Implementation	Y			
Other:	1			
Ongoing Annual Real Costs				
Licensing	N			
Other:				
Ongoing Annual T&E Costs				
Systems Maintenance	N			
Other:				

BPA Process Improvement				C	OST-BENEFI	T CASH FLO	W	
DISCLAIMER: Conceptual cost-benefit analysis	with an esti	mation rang	e between -30%	to +50%				
QUANTITATIVE BENEFITS								
	Rate/Hr	Hrs/Wk	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Increased Revenue								\$0
Materials Savings <sup>3</sup>			\$11,000	\$11,000	\$11,000	\$11,000	\$11,000	\$55,000
Increased Labor Time & Effort (T&E) Capacity <sup>2</sup>								
1 Increased Distributed T&E Capacity <sup>4</sup>	\$26		\$0	\$0	\$0	\$0	\$0	\$0
2 Increased Central T&E Capacity <sup>5</sup>	\$26	69	\$46,420.13	\$95,625	\$98,494	\$101,449	\$104,493	\$446,481
3			\$0	\$0	\$0	\$0	\$0	\$0
4			\$0	\$0	\$0	\$0	\$0	\$0
Totals	1		\$57,420	\$106,625	\$109,494	\$112,449	\$115,493	\$501,481
COSTS	COSTS CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRA							
	Rate/Hr	Total Hrs	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Upfront Real Costs <sup>9</sup>								
Hardware Purchase (input individual years)								\$0
Software Purchase (input individual years)								\$0
Consulting Services (input individual years)								\$0
Other (input individual years)								\$0
Upfront T&E Costs <sup>2</sup>								
Functional <sup>6</sup>								
Project Management	\$38	113	(\$4,291)					(\$4,291)
Business Analysis	\$38	80	(\$3,038)					(\$3,038)
Electronic Documents and Workflows	\$38	178	(\$6,760)					(\$6,760)
Training	\$38	38	(\$1,443)					(\$1,443)
Other:			\$0					\$0
Technical <sup>7</sup>								
Development & Implementation	\$65	80	(\$5,200)					(\$5,200)
Other:			\$0					\$0
Ongoing Annual Real Costs								
Licensing			\$0	\$0	\$0	\$0	\$0	\$0
Other:			\$0	\$0	\$0	\$0	\$0	\$0
Ongoing Annual T&E Costs <sup>2</sup>								
Systems Maintenance <sup>8</sup>			\$0	\$0	\$0	\$0	\$0	\$0
Other:			\$0	\$0	\$0	\$0	\$0	\$0
Totals			(\$20,732)	\$0	\$0	\$0	\$0	(\$20,732)

#### Assumptions:

<sup>1</sup> Assumes a 6 month project process.

<sup>2</sup> Assumes a 3% T&E increase per year for existing employees for increased salary and benefits costs as determined by the MSU Budget Office.

<sup>3</sup> Extrapolated from the OpenMSU Recommendations Subcommittee Proposal Summary (BPAs in FY2012) as well as the MSU Business Process Review Invoice Payment Cost Benefit Analysis in 2006 (cost of one paper with storage). \$11,025 = \$.30 cost of one paper with storage X 36,750 BPAs for FY2012.

<sup>4</sup> Hourly rate is extrapolated from OpenMSU service provider sample hourly rates. Hours per week are extrapolated from OpenMSU Functional Activity Analysis Unit Time Estimates.

<sup>5</sup> Hourly rate is extrapolated from OpenMSU service provider sample hourly rates. Hours per week are extrapolated from the OpenMSU Recommendations Subcommittee Proposal Summary (BPAs in FY2012) as well as the MSU Business Process Review Invoice Payment Cost Benefit Analysis in 2006 (decrease in processing cost per BPA). 69 hours per week = \$2.55 (\$12 MSU-Boz processing costs before process improvement - \$9.45 MSU-Boz processing costs post process improvement) decrease in cost per BPA X 36,750 BPAs for FY2012 / \$26 hourly rate / 52 weeks per year.

<sup>6</sup> Total hours are extrapolated from SunGuard Higher Education electronic document management and workflow proposal in 2009. Hourly rate is based on Banner Module Team Leader rate and includes 35% benefits.

<sup>7</sup> Total hours are extrapolated from SunGuard Higher Education electronic document management and workflow proposal in 2009. Hourly rate is as determined by the ITC Director of Business Administration and includes benefits.

<sup>8</sup> Assumes Ongoing Annual T&E Costs, such as systems maintenance, are provided by the 3 new hires included in the OpenMSU proposal to Eliminate Paper-Based Processes and Inefficiencies.

<sup>9</sup> Assumes costs for hardware and software are included in the OpenMSU proposal to Eliminate Paper-Based Processes and Inefficiencies. Also assumes that the 3 new hires in that proposal and existing project management related personnel (e.g., Banner Module Team Leads) will serve as internal consultants instead of using an external consultant.

BP	A Process Impro	COST-BEN	EFIT BOTTOM LINE				
DISCLAIMER: Concept	ual cost-benefit ana	lysis with an estimat	ion range between -30	0% to +50%⊾			
PERFORMANCE ANALYSIS (Values in this section reflect End of Period)							
Year	Annual Costs	Annual Benefits	Annual Cash Flow	Overall Cash Flow			
1	(\$20,732)	\$57,420	\$36,688	\$36,688			
2	\$0	\$106,625	\$106,625	\$143,314			
3	\$0	\$109,494	\$109,494	\$252,808			
4	\$0	\$112,449	\$112,449	\$365,257			
5	\$0	\$115,493	\$115,493	\$480,749			
Totals	(\$20,732)	\$501,481	\$480,749	\$480,749			
SUMMARY							
DISCOUNT RATE (%) :	5%						
NET PV:	\$409,242.28						
IRR:	229%						

#### Net PV (Net Present Value)

Calculation of the net present value of the project (or investment) is based on Annual Cash Flows and the above stated Discount Rate. The net present value of an investment is <u>today's</u> value of each Annual Cash Flow (Annual Cost - Annual Benefit), summed.

#### IRR (Internal Rate of Return)

IRR is the internal rate of return based on the Annual Cash Flow. IRR requires an initial investment (negative value). So, if the project pays for itself before the end of the first year, the IRR cannot be calculated (without a negative value representing the initial investment). If all of the Annual Cash Flows are positive numbers (no apparent initial investment), an error will result (i.e., #NUM!).

#### **Break-Even Analysis**

The purpose of Break-Even Analysis is to discover when the project will pay for itself. The break even point can be calculated using the Break-Even Ratio followed by the Break Even Point Formulas.

In the following ratio formula, use the Annual and Overall Cash Flow values from the Break-Even Year, which is the first year that Annual Cash Flow is a positive number.

Broak-Evon Patio -	Annual Cash Flow		
	Annual C		
Break-Even Point =	Break-Even Year - 1		

### **Customer Service**

	OpenMSU Proposa	al						
<b>Creating a Culture</b>	of Customer Service: Disney	STAGE Monitor						
PROPOSAL OVERVI	EW							
Primary Contact	Anne Milkovich	Email anne.milkovich@montana.edu						
Title/Department	Recommendations Subcommittee	Phone (406) 994-5715						
Problem Statement	8% of responses to the OpenMSU Customer Service Survey reported a need to improve customer ervice for finance & accounting, HR, IT, purchasing and sponsored programs.							
Proposed Solution	Implement a culture of customer service through cross-functional project team to attend the an alte Disney Institute's program on quality service and I	out administrative support functions. Assign a rnative customer service training program to the bring those strategies to MSU.						
Key Performance Indicators or Outcome Measures	Employee and customer satisfaction with custom Increased number of retained customers.	mployee and customer satisfaction with customer service. Icreased number of retained customers.						
General Time & Effort Required	SMALL-MEDIUM. No dependencies. Exact figures to be determined in Design phase. Training investment in large number of staff. Limited maintenance, communication and adoption management.							
Alternative Solutions	<ul> <li>Use the Disney Institute's program on quality se</li> <li>Implement a customer service culture without a</li> </ul>	rvice. training program.						
ALIGNMENT								
Data Support	Surveys Focus Groups	✓ Professional Expertise						
Initiative Objectives	Operational Efficiency 🗹 Employee Satisfaction							
Departments Served	✓ Academic Depts       ✓ Agencies         ✓ IT Central       ✓ Purchasing Central	<ul> <li>Fin &amp; Acct Central</li> <li>Fin &amp; Acct Central</li> <li>Sponsored Programs</li> <li>University Comm</li> </ul>						
Constituents Served	✓ Service Users         <100         100-500           ✓ Service Providers         <100         100-500	<ul> <li>✓ &gt;500</li> <li>✓ &gt;500</li> </ul>						
Problems Addressed	Paper process 🗹 Customer service 🗌 Central/Di	ist model Lack of integration Comm/Coord acity Allocation/prioritization Compensation						
Processes / Services Addressed	HR Recruiting       Purchasing       IT Supp         BPAs       Budget/Finance       EPAFs/F	ort     Sponsored Programs     Web Dev & Content       Payroll     IT Governance     Employee Relations						
COST-EFFECTIVENE	<b>:</b> \$\$							
<b>DISCLAIMER:</b> Conceptual	cost-benefit analysis with an order of magnitude	e estimate range between -50% to +100%						
Upfront Real Cost	\$ 39,300 Upf	ront T&E Cost \$ 24,700						
Ongoing Annual Cost	\$ - Ongoing An	nual T&E Cost \$ 8,800						
Benefits	Cash Savings Incr. capacity Estim	ated New Net \$ (90,600)						
COMMENTS AND RE	COMMENDATIONS							
Alignment Rating	0% Cost-Effectiveness Rating 0%	Probability of Success Rating 0%						
Tabled in favor of Alternati	ve 1, broader view than just Disney Institute.							

#### Improve service customer satisfaction- improve customer service

#### **Supporting Data**

- In response to the OpenMSU Service Provider Survey, there were 97 customer service themed comments, placing customer service as the top comment theme area for this survey.
- In response to the OpenMSU Service Customer Survey, 38% of comments responded that customer service improvement was needed in finance & accounting, HR, IT, purchasing and sponsored programs administration at MSU.

#### **Detailed Problem Statement**

According to the OpenMSU surveys there is significant campus demand for improved customer service from administrative and technical functions at MSU.

#### **Detailed Solution Statement**

Implement a culture of customer service throughout administrative support functions. Assign a cross-functional project team to attend the Disney Institute's program on quality service to "develop an organizational culture that supports consistent delivery of quality service" and bring those strategies to MSU.

#### **Alternative solution**

- Use an alternative customer service training program.
- Implement a customer service culture without a training program.

Creating a Cultur	e of Custo	mer Service COST-BENEFIT SUMMARY
DISCLAIMER: Conceptual cost-benefit an	alysis with a	an order of magnitude estimate range between -50% to +100%.
QUANTITATIVE BENEFITS		
	Applicable (Y or N)	Additional Info
Increased Revenue	N	
Materials Savings	N	
Labor Time & Effort (T&E) Savings	N	
1 Reduced Distributed T&E		
2 Reduced Central T&E		
QUALITATIVE BENEFITS		
Benefit		Additional Info
1 Improve service customer satisfaction		Improve customer service
COSTS		
	Applicable (Y, N or Maybe)	Additional Info
Upfront Real Costs	,	
Hardware Purchase	N	
Software Purchase	N	
Consulting Services	N	
Other:	Y	Attendance at quality service training program.
Upfront T&E Costs		
Functional		
Project Management	Y	
Business Analysis	N	
Training	Y	
Other:		
Technical		
Development & Implementation	N	
Other:		
Ongoing Annual Real Costs		
Licensing	N	
Other:		
Ongoing Annual T&E Costs		
Systems Maintenance	N	
Other:		

Creating a Cultu	ure of Cus	tomer Serv	vice		C(	OST-BENEFI	T CASH FLO	W
DISCLAIMER: Conceptual cost-benefit analys	is with an o	rder of magr	nitude estimate r	ange between	-50% to +100%			
QUANTITATIVE BENEFITS								
	Rate/Hr	Hrs/Wk	Year 1	Year 2	Year 3	Year 4	Year 5	Totals
Increased Revenue								\$0
Materials Savings								\$0
Time & Effort (T&E) Savings**								
1			\$0	\$0	\$0	\$0	\$0	\$0
2			\$0	\$0	\$0	\$0	\$0	\$0
Totals	<u> </u>		\$0	\$0	\$0	\$0	\$0	\$0
COSTS								
	Rate/Hr	Total Hrs	Year 1	Year 2	Year 3	Year 4	Year 5	Totals
Upfront Real Costs								
Hardware Purchase (input individual years)								\$0
Software Purchase (input individual years)								\$0
Consulting Services (input individual years) <sup>1</sup>			(\$23,960)					(\$23,960)
Other (input individual years) <sup>2</sup>			(\$15,345)					(\$15,345)
Upfront T&E Costs**								
Functional <sup>3</sup>								
Project Management <sup>4</sup>	\$26	48	(\$1,248)					(\$1,248)
Business Analysis		T	\$0					\$0
Training <sup>5</sup>	\$26	900	(\$23,400)					(\$23,400)
Other:			\$0					\$0
Technical								
Development & Implementation			\$0					\$0
Other:			\$0					\$0
Ongoing Annual Real Costs								
Licensing	L		\$0	\$0	\$0	\$0	\$0	\$0
Other:	L		\$0	\$0	\$0	\$0	\$0	\$0
Ongoing Annual T&E Costs**								
Systems Maintenance <sup>6</sup>	\$26	300		(\$8,190)	(\$8,600)	(\$9,029)	(\$9,481)	(\$35,300)
Other:			\$0	\$0	\$0	\$0	\$0	\$0
Totals			(\$63,953)	(\$8,190)	(\$8,600)	(\$9,029)	(\$9,481)	(\$99,253)
Accumptions				· · · · ·				

Assume 8 MSU employees will attend (4 from central departments & 4 from distributed departments). Consulting cost is for a 3 1/2 training day program

Includes travel costs- hotel rooms, flights to Orlando, and per diem meals for 8 people for 5 days

Hourly rate is extrapolated from OpenMSU service provider sample hourly rates.

3 hours to schedule travel/training, 2 hours to select participants & determine funding source. Training development and implementation of 20 hours to discuss/schedule training, compile information & prepare presentation; 18 hours of training (six 3 hour sessions); 5 hours evaluating training/receiving feedback

Three hour training provided for 300 attendess (about 500 service providers with a 60% attendance rate)

Supplemental three hour training for 100 attendees provided annually.

\* Assumes a 3% T&E increase per year for existing employees for increased salary and benefits costs as determined by the MSU Budget Office.

#### Creating a Culture of Customer Service

**COST-BENEFIT BOTTOM LINE** 

# DISCLAIMER: Conceptual cost-benefit analysis with an order of magnitude estimate range between -50% to +100%.

Year Annual Costs Annual Benefits Annual Cash Flow Overall Cas	h Flow
<b>1</b> (\$63,953) \$0 (\$63,953) (\$63,95	i3)
<b>2</b> (\$8,190) \$0 (\$8,190) (\$72,14	3)
<b>3</b> (\$8,600) \$0 (\$8,600) (\$80,74	3)
<b>4</b> (\$9,029) \$0 (\$9,029) (\$89,77	'2)
<b>5</b> (\$9,481) \$0 (\$9,481) (\$99,25	53)
<b>Totals</b> (\$99,253) \$0 (\$99,253) (\$99,25	53)
SUMMARY	
DISCOUNT RATE (%) : 5%	
NET PV: (\$90,621.90)	
IRR: NA for neg return	

#### Net PV (Net Present Value)

Calculation of the net present value of the project (or investment) is based on Annual Cash Flows and the above stated Discount Rate. The net present value of an investment is <u>today's</u> value of each Annual Cash Flow (Annual Cost - Annual Benefit), summed.

#### **IRR (Internal Rate of Return)**

IRR is the internal rate of return based on the Annual Cash Flow. IRR requires an initial investment (negative value). So, if the project pays for itself before the end of the first year, the IRR cannot be calculated (without a negative value representing the initial investment). If all of the Annual Cash Flows are positive numbers (no apparent initial investment), an error will result (i.e., #NUM!).

#### Break-Even Analysis

The purpose of Break-Even Analysis is to discover when the project will pay for itself. The break even point can be calculated using the Break-Even Ratio followed by the Break Even Point Formulas.

In the following ratio formula, use the Annual and Overall Cash Flow values from the Break-Even Year, which is the first year that Annual Cash Flow is a positive number.

Brook Evon Potio	Annual Cash Flow		
Diedk-Even Kalio =	Annual C		
Break-Even Point =	Break-Even Year - 1		

## Eliminate Paper

	OpenMSU Proposa	al						
Eliminate Paper-ba	sed and Manual Processes	STAGE Prioritization						
PROPOSAL OVERVIE	EW							
Primary Contact	David Court	Email dcourt@montana.edu						
Title/Department	Finance Module Team Lead	Phone 406-994-2704						
Problem Statement	Paper-based processes are inefficient and costly space allocation. 86% of respondents prefer elect comments placed automation in the top 5 areas f significant amount of time and resources working documents are also costly to create, store and re-	Paper-based processes are inefficient and costly, negatively impact customer service, and impact pace allocation. 86% of respondents prefer electronic processes over paper-based. 53 survey comments placed automation in the top 5 areas for improvement. All parts of the university spend a significant amount of time and resources working with manual paper-based processes. Paper documents are also costly to create, store and retrieve.						
Proposed Solution	Assign cross-functional project team to assess, c solution and manage organizational change. Doc as an image rather than in a physical file. Worflow processes.	design, and implement Electronic Doc Mgt Workfov cument Management stores an external document w automates approval queues and administrative						
Key Performance Indicators or Outcome Measures	Number of departments adopting imaging over pa Reduced process cycle times Employee satisfaction with ease of use Reduction of physical paper storage	aper						
General Time & Effort Required	VERY LARGE. Exact figures to be determined in Design phase. scale training, communication and adoption man areas.	VERY LARGE. Exact figures to be determined in Design phase. Significant IT implementation as well as large- scale training, communication and adoption management throughout the functional business areas.						
Alternative Solutions	<ul> <li>Implement multiple integrated electronic docum support different business needs.</li> <li>Hire an outside consultant to implement EDMW</li> </ul>	ent management and workflow solutions to						
ALIGNMENT								
Data Support	Surveys Focus Groups	Professional Expertise						
Initiative Objectives	Operational Efficiency     Employee Satisfaction	1						
Departments Served	✓ Academic Depts       ✓ Agencies         ✓ IT Central       ✓ Purchasing Central	<ul> <li>Fin &amp; Acct Central</li> <li>Fin &amp; Acct Central</li> <li>Sponsored Programs</li> <li>University Comm</li> </ul>						
Constituents Served	✓ Service Users         □ <100         □ 100-500           ✓ Service Providers         □ <100         □ 100-500	0 ♥ >500 0 ♥ >500						
Problems Addressed	<ul> <li>Paper process</li> <li>Customer service</li> <li>Central/Di</li> <li>Redundancy</li> <li>Staff expertise</li> <li>Staff capa</li> </ul>	Dist model       Image: Lack of integration       Image: Comm/Coord         acity       Allocation/prioritization       Compensation						
Processes / Services Addressed	HR Recruiting       Purchasing       IT Supp         BPAs       Budget/Finance       EPAFs/I	port         Sponsored Programs         Web Dev & Content           /Payroll         IT Governance         Employee Relations						
COST-EFFECTIVENE	SS							
DISCLAIMER: Conceptual	cost-benefit analysis with an estimation range b	between -30% to +50%						
Upfront Real Cost	\$ 309,000 Upf	front T&E Cost \$ 15,300						
Ongoing Annual Cost	\$ - Ongoing An	nual T&E Cost \$ 239,000						
Benefits	Cash Savings V Incr. capacity Estimated Net	w Net (5 year) \$ (705,000) *						
COMMENTS AND RE								
Alignment Rating	80% Cost-Effectiveness Rating 80%	Probability of Success Rating 85%						
* Note that this net is calculated if technology was applied to a single business process (Banner Payment Authorization), however, the technology would be scalable to many processes from many functions (potentially including non-OpenMSU functions such as the Registrar's Office). The estimated new net would improve as the technology is applied to additional business processes. **Probability of success is dependent on leadership commitment & fully resourced.								

- Reduce cycle times- implement automated processes that take less service provider time.
- **Coordinate activities-** manual processes allow for greater process variation which leads to less coordination.
- **Increase capacity-** implement automated processes that take less service provider time to create additional service provider capacity.
- **Improve service provider satisfaction-** meet campus demand for elimination of paper-based processes and inefficiencies and implement more user-friendly processes.
- **Improve service customer satisfaction-** meet campus demand for elimination of paper-based processes and inefficiencies and implement more user-friendly processes.
- **Improve allocation-** enable shared services, which can improve the allocation of services among MSU units, through automated processes.

#### Supporting Data

- In response to the OpenMSU Service Provider Survey:
  - 86% of respondents stated that they would prefer to use electronic process in place of paperbased processes.
  - There were 53 automation themed comments, placing automation in the top five of comment theme areas for this survey.
- In response to the OpenMSU Service Customer Survey, there were 80 process overall (take too long, too
  difficult, duplicate effort, paper/manual) themed comments, placing processes overall in the top three of
  comment theme areas for this survey.
- According to Gartner technology research consulting firm, the average accounts payable organization may incur costs associated with paper documents as follows:
  - The average document is copied, either physically or electronically, nine to 11 times at a cost of about \$18,
  - Documents cost about \$20 to file,
  - Retrieving a misfiled document costs about \$120.

#### **Detailed Problem Statement**

Paper-based processes are inherently less efficient than automated processes, can negatively impact customer service and generate costs associated with creating, storing and retrieving paper documents. Manual paper-based processes inherently take longer to complete because of time associated with actions such as creating multiple copies of a document, physical delivery of documents to different approvers, entering the same data into both manual forms and electronic systems and correcting errors not detected when preparing paper documents.

Paper-based processes can also negatively affect customer service. For example, "The Scholarship Authorization Form and Staff/Dependent Fee Waiver Form" often causes graduate students to receive a tuition and fee statement that is inaccurate because their departmental waivers have not been recorded in time for payment due dates because of the lengthy trip the form must take from the department to the Graduate School to OSP and finally to the Office of Financial Aid. Costs associated with creating, storing and retrieving paper documents include the following:

- Costs to create paper documents include materials such as paper, toner, envelopes and postage.
- Physical space is limited and expensive to rent or build and better utilized for offices or other workspace than for paper storage, and other costs for storage include file folders, labels and cabinets.
- Retrieving paper documents can take significant amounts of time for actions such as locating mishandled paper documents and identifying, pulling and moving paper documents to relocate, archive or destroy.

Paper-based processes also impact organizational space requirements. Workgroups and support functions must be located in proximity to shared documents or inefficiencies are further exacerbated. This impedes the university's ability to focus the campus core on student-centric services and move support services to the periphery.

Paper-based processes also impede four-campus integration as records cannot be easily shared across campuses. The human factor of "inconvenience" subtly prevents the already challenging integration of cultures and sub-cultures by putting nuisance obstacles in the way of least resistance.

Finally, in addition to the campus demand for automation and improved processes demonstrated by the OpenMSU Service Provider survey, the departments of Financial Aid, Admissions, The Graduate School, Auxiliary Services, HR, University Business Services, Facilities Services, and Safety & Risk Management have all independently expressed interest in electronic document management and workflow services.

Some MSU campuses and units have already implemented separate and different document imaging software applications and services, or are planning to do so, thereby impeding savings from shared licensing and maintenance of an enterprise solution.

#### **Detailed Solution Statement**

Assign a project team to assess, design, and implement Electronic Document Management and Workflow functionality to replace many of the current paper-based approvals and notifications currently performed by our staff.

- Document Management would allow an external document such as a student's tax return, a vendor invoice, etc., to be filed as an image and attached within the Banner system, rather than in a physical file.
- Time spent waiting for the physical re-location of documents to various campuses and offices would diminish to the time needed for electronic approval only, and no copies need be stored.

Administration has already set aside funding for the one-time costs of

- servers, scanners, and other hardware,
- professional services including project management, installation, technical training, functional training, system verification, onsite travel, post implementation review, and a needs analysis.

It is estimated that permanent funding for this solution requires at least 1 - 2 IT personnel and one functional position located in A&F to support all functional areas. Anticipated recurring costs include a junior-level programmer, a server administrator, and a system analyst.

#### **Alternative Solution**

Implement multiple integrated electronic document management and workflow solutions to support different business needs.

Eliminate Paper-Based Processes and Inefficiencies COST-BENEFIT SUMMARY						
DISCLAIMER: Conceptual cost-benefit analysis with an estimation range between -30% to +50%.						
QUANTITATIVE BENEFITS						
	Applicable (Y, N Probable, Possible)	Additional Info				
Increased Revenue N						
Materials Savings	Probable	Paper, toner, ink, envelopes, postage. Storage space. Not yet quantitable.				
Increased Labor Time & Effort (T&E) Capacity	Probable	initial process for workflow has not been determined yet so not quantifiable.				
1 Increased Distributed T&E Capacity						
2 Increased Central T&E Capacity						
QUALITATIVE BENEFITS	_					
Benefit		Additional Info				
1 Reduce cycle times		Implement automated processes that take less service provider time. Technology could potentially be applied to many paper processes for many functions.				
2 Coordinate activities		Manual processes allow for greater process variation which leads to less coordination.				
3 Increase capacity		Implement automated processes that take less service provider time to create additional service provider capacity.				
4 Improve service provider satisfaction		Meet campus demand for elimination of paper-based processes and inefficiencies and implement more user-friendly processes.				
5 Improve service customer satisfaction		Meet campus demand for elimination of paper-based processes and inefficiencies and implement more user-friendly processes.				
6 Improve allocation		Enable shared services, which can improve the allocation of services among MSU units, through automated processes.				
COSTS						
	Applicable (Y, N Probable, Possible)	Additional Info				
Upfront Real Costs						
Hardware Purchase	N	\$100K infrastructure/workstations (servers, scanners, etc.) already funded.				
Software Purchase	N	\$100K infrastructure/workstations (servers, scanners, etc.) already funded.				
Consulting Services	Y					
Other:						
Upfront T&E Costs						
Functional	X					
Project Management	Ý	For one presses to be determined				
Business Analysis	ř V	For one process to be determined				
Training	ř V					
Other:	1					
Technical						
Development & Implementation	Y					
Other:	· ·					
Ongoing Annual Real Costs						
Licensing	N					
Systems Maintenance: New positions (3)	Y	Junior-level programmer, server administrator, system analyst				
Other: Computer & Training	Y	Computer and related supplies (1 @ \$2,000) and travel to training (3 @ \$2,000)				
Ongoing Annual TRE Costs	1					
Chigoing Annual Tae Cosis						

Eliminate Paper-Based Processes and Inefficiencies COST-BENEFIT CASH FLOW						W		
DISCLAIMER: Conceptual cost-benefit analysis	with an est	imation rang	ge between -30%	% to +50%.				
QUANTITATIVE BENEFITS								
	Rate/Hr	Hrs/Wk	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Increased Revenue								\$0
Materials Savings								\$0
Increased Time & Effort (T&E) Capacity <sup>2</sup>								
1			\$0	\$0	\$0	\$0	\$0	\$0
2			\$0	\$0	\$0	\$0	\$0	\$0
Totals			\$0	\$0	\$0	\$0	\$0	\$0
COSTS								
	Rate/Hr	Total Hrs	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Upfront Real Costs								
Hardware Purchase (input individual years)								\$0
Software Purchase (input individual years)								\$0
Consulting Services (input individual years) <sup>3</sup>			(\$175,000)					(\$175,000)
Other (input individual years)								\$0
Upfront T&E Costs <sup>2</sup>								
Functional <sup>4</sup>								
Project Management	\$38	47	(\$1,785)					(\$1,785)
Business Analysis	\$38	48	(\$1,823)					(\$1,823)
Electronic Document and Workflow	\$38	44	(\$1,671)					(\$1,671)
Training	\$38	40	(\$1,519)					(\$1,519)
Other:	\$38	225	(\$8,550)					(\$8,550)
Technical <sup>4</sup>								
Development & Implementation			\$0					\$0
Other:			\$0					\$0
Ongoing Annual Real Costs						ľ		
Licensing <sup>5</sup>			\$0	\$0	\$0	\$0	\$0	\$0
Systems Maintenance: New positions (3)	\$31	4160	(\$130,000)	(\$218,900)	(\$228,094)	(\$234,936)	(\$241,984)	(\$1,053,914)
Other: Computer (1) & Training (3) <sup>3</sup>	\$8,000		(\$4,000)	(\$8,000)	(\$8,000)	(\$8,000)	(\$8,000)	(\$36,000)
Ongoing Annual T&E Costs <sup>2</sup>								
Other:								
Totals			(\$324,348)	(\$226,900)	(\$236,094)	(\$242,936)	(\$249,984)	(\$1,280,262)

Assumptions:

<sup>1</sup> Assumes a 6 month Project Process.

<sup>2</sup> Assumes a 3% increase per year as determined by the MSU Budget Office. Quantitative Benefits for T&E Savings and Materials Savings were not estimated because initial process for workfllow conversion has not yet been determined.

<sup>3</sup> Based on Sunguard Higher Education Banner Document Management and Workflow proposal from 2010.

<sup>4</sup> Total Hours are extrapolated from the MSU Investment Proposal for Institutional Priorities for Electronic Workflow and Document Management in December 2011. Assumes all Client Task technical hours from that proposal are included in Ongoing Annual T&E Costs for New Hires instead of in Upfront T&E Costs that are Technical. Functional hourly rate is based on Banner Module Team Leader rate and includes 35% benefits.

<sup>5</sup> Assumes Licensing is not applicable or is included with software costs that are already funded.

<sup>6</sup> Assumes new position wage rates are unchanged from the MSU Investment Proposal for Institutional Priorities for Electronic Workflow and Document Management in December 2011. Assumes 2,080 hours per full year. Two of three new positions would be hired in year one with the other in year two.

## Eliminate Paper-Based Processes and Inefficiencies & COST-BENEFIT CASH FLOW BPA Process Improvement Combined DISCLAIMER: Conceptual cost-benefit analysis with an estimation range between -30% to +50%.

		-	
QUANTITATIVE BENEFITS			
	5-Yr Totals w/o BPA	5-Yr Totals for BPA	5-Yr Totals w/ BPA
Increased Revenue	\$0	\$0	\$0
Materials Savings	\$0	\$55,000	\$55,000
Increased Time & Effort (T&E) Capacity			
1 Increased Distributed T&E Capacity	\$0	\$0	\$0
2 Increased Central T&E Capacity	\$0	\$446,481	\$446,481
3	\$0	\$0	\$0
4	\$0	\$0	\$0
Totals	\$0	\$501,481	\$501,481
COSTS			
	5-Yr Totals w/o BPA	5-Yr Totals for BPA	5-Yr Totals w/ BPA
Upfront Real Costs			
Hardware Purchase (input individual years)	\$0	\$0	\$0
Software Purchase (input individual years)	\$0	\$0	\$0
Consulting Services (input individual years)	(\$175,000)	\$0	(\$175,000)
Other (input individual years)	\$0	\$0	\$0
Upfront T&E Costs			
Functional			
Project Management	(\$1,785)	(\$4,291)	(\$6,076)
Business Analysis	(\$1,823)	(\$3,038)	(\$4,861)
Electronic Document and Workflow	(\$1,671)	(\$6,760)	(\$8,431)
Training	(\$1,519)	(\$1,443)	(\$2,962)
Other:	(\$8,550)	\$0	(\$8,550)
Technical			
Development & Implementation	\$0	(\$5,200)	(\$5,200)
Other:	\$0	\$0	\$0
Ongoing Annual Real Costs			
Licensing	\$0	\$0	\$0
Systems Maintenance: New positions (3)	(\$1,053,914)	\$0	(\$1,053,914)
Other: Computer (1) & Training (3)	(\$36,000)	\$0	(\$36,000)
Ongoing Annual T&E Costs			
Other:		\$0	\$0
Totals	(\$1,280,262)	(\$20,732)	(\$1,300,994)

BPA Process Improvement Combined COST-BENEFIT BOTTOM LINE							
DISCLAIMER: Conceptual cost-benefit analysis with an estimation range between -30% to +50%.							
PERFORMANCE ANALYSIS (Values in this section reflect End of Period)							
Year	Annual Costs	Annual Benefits	Annual Cash Flow	Overall Cash Flow			
1	(\$345,080)	\$57,420	(\$287,660)	(\$287,660)			
2	(\$226,900)	\$106,625	(\$120,275)	(\$407,935)			
3	(\$236,094)	\$109,494	(\$126,600)	(\$534,534)			
4	(\$242,936)	\$112,449	(\$130,487)	(\$665,021)			
5	(\$249,984)	\$115,493	(\$134,491)	(\$799,513)			
Totals	(\$1,300,994)	\$501,481	(\$799,513)	(\$799,513)			
SUMMARY							
DISCOUNT RATE (%) :	5%						
NET PV:	(\$705,145.70)						
IRR:	N/A for neg return						

#### Net PV (Net Present Value)

Calculation of the net present value of the project (or investment) is based on Annual Cash Flows and the above stated Discount Rate. The net present value of an investment is <u>today's</u> value of each Annual Cash Flow (Annual Cost - Annual Benefit), summed.

#### IRR (Internal Rate of Return)

IRR is the internal rate of return based on the Annual Cash Flow. IRR requires an initial investment (negative value). So, if the project pays for itself before the end of the first year, the IRR cannot be calculated (without a negative value representing the initial investment). If all of the Annual Cash Flows are positive numbers (no apparent initial investment), an error will result (i.e., #NUM!).

#### Break-Even Analysis

The purpose of Break-Even Analysis is to discover when the project will pay for itself. The break even point can be calculated using the Break-Even Ratio followed by the Break Even Point Formulas.

In the following ratio formula, use the Annual and Overall Cash Flow values from the Break-Even Year, which is the first year that Annual Cash Flow is a positive number.

Brook Evon Potio	Annual Cash Flow		
Dieak-Even Ralio =	Annual C		
Break-Even Point =	Break-Even Year - 1		

### **HR-EPAFs**

	OpenMSU Proposal							
HR Process Improv	vement: Electronic Pers	onnel Actn Fri	m STAGE	Prioritization				
PROPOSAL OVERVI	EW							
Primary Contact	Anne Milkovich		Email ann	e.milkovich@montana.edu				
Title/Department	Recommendations Sub-Commit	tee Chair	Phone (40	6) 994-5715				
Problem Statement	According to surveys, there is significant campus demand for improved EPAF processing. OpenMSU focus groups indicate the shifting of EPAF processing from central to distributed personnel has led to process inefficiencies. EPAF process was the only process that all 12 units participating in the focus groups commented on as needing improvement.							
Proposed Solution	Assign a qualified project team o providers, to analyze the EPAF pr distribution of labor and duties in and should incorporate workflow	f relevant stakehold ocess. The project volved, potentially c technology to addre	ders, including ce should include a changing personi ess process issi	entral and distributed service nalysis of staffing and nel responsibilities as needed, ues.				
Key Performance Indicators or Outcome Measures	Reduced processing time Reduced rework and error rates Satisfaction with ease of use	Reduced processing time Reduced rework and error rates Satisfaction with ease of use						
General Time & Effort Required	MEDIUM. Exact figures to be dete Electronic Document Manageme management.	rmined in Design p nt and Workflow. M	ohase. Depender loderate training,	nt on implementation of communication and adoption				
Alternative Solutions	<ul> <li>Conduct an EPAF organizationa</li> <li>Include EPAF processing in a s</li> <li>Hire an outside consultant in co</li> </ul>	l improvement proj hared services cen njunction with an ir	ject without workf iter pilot. iternal project tea	low automation.				
ALIGNMENT								
Data Support	Surveys Foc	us Groups	✓ Professional I	Expertise				
Initiative Objectives	✓ Operational Efficiency ✓ Emp	loyee Satisfaction						
Departments Served	<ul> <li>✓ Academic Depts</li> <li>✓ Age</li> <li>✓ IT Central</li> <li>✓ Purc</li> </ul>	ncies 🔽 F hasing Central 🔽 S	Fin & Acct Central Sponsored Program	<ul> <li>✓ HR Central</li> <li>☑ University Comm</li> </ul>				
Constituents Served	□ Service Users     □ <10       ☑ Service Providers     □ <10	0 100-500 0 <b>v</b> 100-500	□ >500 □ >500					
Problems Addressed	Paper process Customer ser	vice 🗌 Central/Dist r se 🔽 Staff capacity	model 🗌 Lack of y 🗌 Allocatio	integration 🔽 Comm/Coord				
Processes / Services Addressed	HR Recruiting Purchasing BPAs Budget/Fin	IT Support ance I EPAFs/Pay	t 🗌 Sponsored /roll 🗌 IT Gov	Programs 🗌 Web Dev & Content vernance 🗌 Employee Relations				
COST-EFFECTIVENESS								
DISCLAIMER: Conceptual	cost-benefit analysis with an orc	ler of magnitude e	stimate range b	etween -50%to +100%				
Upfront Real Cost	** \$ -	Upfro	nt T&E Cost \$	20,700				
Ongoing Annual Cost	** \$ -	Ongoing Annu	al T&E Cost \$	-				
Benefits	Cash Savings 🗹 Incr. capacity	Estimate	ed New Net \$	(19,700) *				
COMMENTS AND RE	COMMENDATIONS							
Alignment Rating	60% Cost-Effectivenes	ss Rating 75%	Proba	ability of Success Rating 80%				
* Although it is probable that a process improvement project would lead to increased time & effort capacity, the estimated percentage reduction to result from process improvement is unknown at this time. ** Dependent on implementation of electronic document management and workflow. Upfront real and ongoing annual costs associated with implementing this technology are captured in the Eliminate Paper-based Processes and Inefficiencies proposal.								

\*\*\*Probability of success is dependent on leadership commitment & being fully resourced.

- Reduce cycle times- implement processes that take less service provider time.
- Coordinate activities- implement processes that improve coordination between central and distributed service providers.
- Increase capacity- implement processes that take less service provider time to create additional service provider capacity.
- Improve service provider satisfaction- meet campus demand for improved HR processes.
- Improve service customer satisfaction- meet campus demand for improved HR processes.

#### **Supporting Data**

- In response to the OpenMSU Service Provider Survey, 5% of responses (18 comments) commented that HR processes overall were the processes most critical to change and/or streamline at MSU. This was the fourth most comments for any process in response to this question.
- In response to the OpenMSU Service Customer Survey, 28 out of 80 process overall themed comments (processes take too long, too difficult, duplicate effort, paper/manual) were about the HR function.

#### **Detailed Problem Statement**

According to the OpenMSU surveys, there is significant campus demand for improved HR processes.

Responsibility for conducting this process has been shifted from central to distributed service providers in recent years. According to distributed service providers involved in OpenMSU focus groups, this shifting of duties appears to have led to process inefficiencies.

All twelve units participating in OpenMSU focus groups commented on the EPAF process as having opportunities for improvement. This was the only process that all focus groups commented on.

#### **Detailed Solution Statement**

Conduct a process analysis of the EPAF process to reduce cycle times, increase the capacity of HR service providers and meet campus demand for improved HR processes. The project team should be comprised of relevant stakeholders, including central and distributed service providers, to ensure proper design. The project should include analysis of the appropriate staffing and distribution of labor and duties involved in the process, potentially changing the duties of the personnel involved as needed.

The EPAF project should incorporate workflow technology to help address process issues involving reviews and approvals.

#### **Alternative Solution**

- Conduct an EPAF organizational improvement project without automating it through the use of workflow technology.
- Include EPAF processing in a shared services center pilot to provide EPAF support to multiple units.

HR Process Improvement: Electro	HR Process Improvement: Electronic Personnel Action Form (EPAF) COST-BENEFIT SUMMARY						
DISCLAIMER: Conceptual cost-benefit analysis with an order of magnitude estimate range between -50% to +100%.							
QUANTITATIVE BENEFITS							
	Applicable (Y, N Probable, Possible)	Additional Info					
Increased Revenue	N						
Materials Savings	N Brobable						
1 Increased Distributed T&E Capacity	TODADIC	OpenMSU Functional Activity Analysis preliminary results estimate the following as-is distributed time: 5,074 EPAFs per year at about 21 minutes hands-on time per EPAF, resulting in total annual time of about 1,776 hours or the equivalent of .85 FTE. The estimated percentage reduction to result from process improvement is unknown and depends on MSU's decision during this project as to whether to enhance or replace the current EPAF system. One university that implemented EPAFs for PeopleSoft (university-wide software application) reduced total FTE for EPAF processing by 75%, and another university reduced central HR office overtime by 88%.					
2 Reduced Central T&E Capacity		Estimated as-is central time could not be obtained and estimated percentage reduction to result from process improvement is unknown.					
QUALITATIVE BENEFITS							
Benefit		Additional Info					
1 Reduce cycle times		Implement processes that take less service provider time. Some universities that implemented EPAFs for PeopleSoft reduced processing time by at least 70% and reduced error rates by at least 94%.					
2 Coordinate activities		Implement processes that improve coordination between central and distributed service providers.					
3 Increase capacity		provider capacity.					
4 Improve service provider satisfaction		Meet campus demand for improved HR processes.					
5 Improve service customer satisfaction		Meet campus demand for improved HR processes.					
COSTS	Applicable (Y, N Probable, Possible)	Additional Info					
Upfront Real Costs							
Hardware Purchase	N						
Software Purchase	Possible	Depends on decision during this project as to whether to enhance/replace current system.					
Other:	N N	Electronic document and worknow development led by MSO project leader (Banner MTL)					
Upfront T&E Costs							
Functional							
Project Management	Y						
Business Analysis	Y						
Electronic Documents and Workflows	Y	Electronic document and workflow development led by MSO project leader (Banner MIL)					
Other:	1						
Technical							
Development & Implementation	Y						
Other:							
Ongoing Annual Real Costs	<b>N</b> 1						
Other	N						
Ongoing Annual T&E Costs							
Systems Maintenance	Possible	Depends on decision during this project as to whether to enhance/replace current system.					
Other:							

HR Process Improvement: Electronic Personnel Action Form (EPAF) COST-BENEFIT CASH FLOW						w		
DISCLAIMER: Conceptual cost-benefit analysis	with an orde	r of magnitu	ide estimate ran	ige between -50	J% to +100%.			
QUANTITATIVE BENEFITS								
	Rate/Hr	Hrs/Wk	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Increased Revenue								\$0
Materials Savings								\$0
Increased Labor Time & Effort (T&E) Capacity <sup>2</sup>								
1 Increased Distributed T&E Capacity			\$0	\$0	\$0	\$0	\$0	\$0
2 Increased Central T&E Capacity			\$0	\$0	\$0	\$0	\$0	\$0
3			\$0	\$0	\$0	\$0	\$0	\$0
4			\$0	\$0	\$0	\$0	\$0	\$0
Totals			\$0	\$0	\$0	\$0	\$0	\$0
COSTS								
	Rate/Hr	Total Hrs	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Upfront Real Costs <sup>6</sup>								
Hardware Purchase (input individual years)								\$0
Software Purchase (input individual years)								\$0
Consulting Services (input individual years)								\$0
Other (input individual years)								\$0
Upfront T&E Costs <sup>2</sup>								
Functional <sup>3</sup>								
Project Management	\$38	113	(\$4,291)				,	(\$4,291)
Business Analysis	\$38	80	(\$3,038)					(\$3,038)
Electronic Documents and Workflows	\$38	178	(\$6,760)					(\$6,760)
Training	\$38	38	(\$1,443)					(\$1,443)
Other:			\$0					\$0
Technical <sup>4</sup>								
Development & Implementation	\$65	80	(\$5,200)					(\$5,200)
Other:			\$0					\$0
Ongoing Annual Real Costs								
Licensing			\$0	\$0	\$0	\$0	\$0	\$0
Other:			\$0	\$0	\$0	\$0	\$0	\$0
Ongoing Annual T&E Costs <sup>2</sup>								
Systems Maintenance <sup>5</sup>			\$0	\$0	\$0	\$0	\$0	\$0
Other:	1		\$0	\$0	\$0	\$0	\$0	\$0
Totals			(\$20,732)	\$0	\$0	\$0	\$0	(\$20,732)

#### Assumptions:

<sup>1</sup> Assumes a 6 month project process.

<sup>2</sup> Assumes a 3% T&E increase per year for existing employees for increased salary and benefits costs as determined by the MSU Budget Office.

<sup>3</sup> Total hours are extrapolated from SunGuard Higher Education electronic document management and workflow proposal in 2009. Hourly rate is based on Banner Module Team Leader rate and includes 35% benefits.

<sup>4</sup> Total hours are extrapolated from SunGuard Higher Education electronic document management and workflow proposal in 2009. Hourly rate is as determined by the ITC Director of Business Administration and includes benefits.

<sup>5</sup> Assumes Ongoing Annual T&E Costs, such as systems maintenance, are provided by the 3 new hires included in the OpenMSU proposal to Eliminate Paper-Based Processes and Inefficiencies.

<sup>6</sup> Assumes costs for hardware and software are included in the OpenMSU proposal to Eliminate Paper-Based Processes and Inefficiencies. Also assumes that the 3 new hires in that proposal and existing project management related personnel (e.g., Banner Module Team Leads) will serve as internal consultants instead of using an external consultant.

### HR Process Improvement: Electronic Personnel Action COST-BENEFIT BOTTOM LINE Form (EPAF)

# DISCLAIMER: Conceptual cost-benefit analysis with an order of magnitude estimate range between -50% to +100%

PERFORMANCE ANALYSIS (Values in this section reflect End of Period)							
Year	Annual Costs	Annual Benefits	Annual Cash Flow	Overall Cash Flow			
1	(\$20,732)	\$0	(\$20,732)	(\$20,732)			
2	\$0	\$0	\$0	(\$20,732)			
3	\$0	\$0	\$0	(\$20,732)			
4	\$0	\$0	\$0	(\$20,732)			
5	\$0	\$0	\$0	(\$20,732)			
Totals	(\$20,732)	\$0	(\$20,732)	(\$20,732)			
SUMMARY							
DISCOUNT RATE (%) :	5%						
NET PV:	(\$19,744.74)						
IRR	N/A for neg return						

#### Net PV (Net Present Value)

Calculation of the net present value of the project (or investment) is based on Annual Cash Flows and the above stated Discount Rate. The net present value of an investment is <u>today's</u> value of each Annual Cash Flow (Annual Cost - Annual Benefit), summed.

#### IRR (Internal Rate of Return)

IRR is the internal rate of return based on the Annnual Cash Flow. IRR requires an initial investment (negative value). So, if the project pays for itself before the end of the first year, the IRR cannot be calculated (without a negative value representing the initial investment). If all of the Annual Cash Flows are positive numbers (no apparent initial investment), an error will result (i.e., #NUM!).

#### Break-Even Analysis

The purpose of Break-Even Analysis is to discover when the project will pay for itself. The break even point can be calculated using the Break-Even Ratio followed by the Break Even Point Formulas.

In the following ratio formula, use the Annual and Overall Cash Flow values from the Break-Even Year, which is the first year that Annual Cash Flow is a positive number.

Brook Evon Potio	Annual Cash Flow		
Dieak-Even Kalio =	Annual C		
Break-Even Point =	Break-Even Year - 1		

## **HR-Payroll**

OpenMSU Proposal							
HR Process Improv	vement: Payroll	STAC	GE Prioritization				
PROPOSAL OVERVI	EW						
Primary Contact	Anne Milkovich	Email	anne.milkovich@montana.edu				
Title/Department	Recommendations Sub-Committee Chair	Phone	(406) 994-5715				
Problem Statement	Payroll had the fourth most survey comments for should at MSU, and it had the third most comments streamline.	or an activity that to ents as the proce	ook significantly longer than it ess most critical to change and/o	or			
Proposed Solution	Assign a project team including central and dis to analyze and improve payroll processes. An e processes are complex and we do not have the HR processes.	tributed service p xternal consultan staff capacity or o	providers with an external consult at is recommended because HR expertise to adequately redesign	tant n			
Key Performance Indicators or Outcome Measures	Payees processed per payroll FTE Percent off-cycle payments Percent employee self service utilization Payroll error rate						
General Time & Effort Required	MEDIUM. Exact figures to be determined upon 0 to determine the current process state. Moderat management throughout Human Resources ce	Concept clearance te training, comm entral and distribu	e. Effort investment with consulta nunication and adoption uted.	ant			
Alternative Solutions	Conduct a payroll process improvement proje	ct without the ass	sistance of an external consultan	ıt.			
ALIGNMENT							
Data Support	Surveys Focus Groups	Profession	ional Expertise				
Initiative Objectives	Operational Efficiency     Employee Satisfaction	on					
Departments Served	Image: Academic Depts     Image: Agencies       Image: Image: Academic Depts     Image: Agencies       Image: Image: Image: Academic Depts     Image: Agencies       Image: Image: Image: Image: Academic Depts     Image: Agencies       Image: Image	<ul><li>Fin &amp; Acct Cen</li><li>Sponsored Prog</li></ul>	ntral 🗹 HR Central ograms 🗹 University Comm				
Constituents Served	□ Service Users         □         100-5           ☑ Service Providers         □         100-5	00					
Problems Addressed	Paper process      Customer service      Central     Redundancy      Staff expertise      Staff ca	/Dist model 🔲 Lad pacity 🗌 Alle	ck of integration 🗹 Comm/Coor ocation/prioritization 🗌 Compensat	rd tion			
Processes / Services Addressed		pport 🗌 Sponse s/Payroll 🗌 IT	sored Programs     Image: Web Dev & Cont       T Governance     Image: Employee Relation	ions			
COST-EFFECTIVENE	SS						
DISCLAIMER: Conceptual	cost-benefit analysis with an order of magnitu	de estimate ranç	ge between -50% to +100%				
Upfront Real Cost	\$ 14,400 U	pfront T&E Cost	\$ 17,300				
Ongoing Annual Cost	S - Ongoing A	Annual T&E Cost	\$-				
Benefits	Cash Savings 🗹 Incr. capacity Esti	mated New Net	\$ (30,200) *				
COMMENTS AND RE	COMMENDATIONS	_					
Alignment Rating	65%Cost-Effectiveness Rating70%	6 P	Probability of Success Rating 7	70%			
* Although it is probable th percentage reduction to re **Probability of success is This proposal is rated con internal resources as muc	Alignment Rating         65%         Cost-Effectiveness Rating         70%         Probability of Success Rating         70%           ' Although it is probable that a process improvement project would lead to increased time & effort capacity, the estimated bercentage reduction to result from process improvement is unknown at this time.         **						

- **Increase capacity-** implement processes that take less service provider time to create additional service provider capacity.
- Reduce cycle times- implement processes that take less service provider time.
- **Coordinate activities-** implement processes that improve coordination between central and distributed service providers.
- Improve service provider satisfaction- meet campus demand for improved payroll processes.
- Improve service customer satisfaction- meet campus demand for improved HR processes.

#### **Supporting Data**

- In response to the OpenMSU Service Provider Survey:
  - 8% of responses (28 comments) commented that payroll was the process most critical to change and/or streamline at MSU. This was the third most comments for any process in response to this question.
  - 6% of responses (27 comments) commented that payroll was an activity that took significantly longer than it should at MSU. This was the fourth most comments for any activity in response to this question.
  - 5% of responses (18 comments) commented that HR processes overall were the processes most critical to change and/or streamline at MSU. This was the fourth most comments for any process in response to this question.
- In response to the OpenMSU Service Customer Survey, 28 out of 80 process overall themed comments (processes take too long, too difficult, duplicate effort, paper/manual) were about the HR function.
- New York University's benchmark for "Payees processed per Payroll FTE" is about 984 employees. As of October 12, 2012, MSU's payees processed per payroll FTE was about 846 employees. Based on that benchmark, it appears MSU has room for improvement.

#### **Detailed Problem Statement**

According to the OpenMSU surveys, there is significant campus demand for improved payroll processes.

#### **Detailed Solution Statement**

Assign a project team of relevant stakeholders, including central and distributed service providers, to work with an external consultant to analyze and improve payroll processes to reduce cycle times, increase the capacity of the HR Office and to meet campus demand for improved HR processes. An external consultant is recommended because HR processes are inherently complex and because MSU does not currently have the staff capacity or expertise to adequately redesign HR processes.

#### **Alternative Solution**

• Conduct a payroll process improvement project without the assistance of an external consultant.

HR Process Imp	ovement:	Payroll COST-BENEFIT SUMMARY		
DISCLAIMER: Conceptual cost-benefit analysis	s with an oro	der of magnitude estimation range between -50% to +100%.		
QUANTITATIVE BENEFITS				
	Applicable (Y, N Probable, Possible)	Additional Info		
Increased Revenue	N			
Materials Savings	N			
Increased Labor Time & Effort (T&E) Capacity	Probable	OpenMSLL Europienel Activity Analysis preliminany results actimate the following as is		
1 Increased Distributed T&E Capacity		distributed time: 86,844 timesheets per year (7,237 per month) at about 14 minutes hands- on time to monitor each timesheet, resulting in total annual time of about 20,263 hours or the equivalent of about 10 FTE. The estimated percentage reduction to result from process improvement is unknown.		
2 Reduced Central T&E Capacity		Estimated as-is central time could not be obtained and estimated percentage reduction to result from process improvement is unknown.		
QUALITATIVE BENEFITS				
Benefit		Additional Info		
1 Increase capacity		Implement processes that take less service provider time to create additional service provider capacity. New York University's benchmark for "Payees processed per Payroll FTE" is about 984 employees. As of October 12, 2012, MSU's payees processed per payroll FTE was about 846 employees. Based on that benchmark, it appears MSU has room for improvement.		
2 Reduce cycle times		Implement processes that take less service provider time.		
3 Coordinate activities		Implement processes that improve coordination between central and distributed service providers.		
4 Improve service provider satisfaction		Meet campus demand for improved HR processes.		
5 Improve service customer satisfaction		Meet campus demand for improved HR processes.		
COSTS				
	Applicable (Y, N Probable, Possible)	Additional Info		
Upfront Real Costs				
Hardware Purchase	N Bossible	Depends on recommendations from external consultant during this project		
Consulting Services	Y	80 hours at \$180/hour		
Other:				
Upfront T&E Costs				
Functional				
Project Management	Y	Six weeks of a project managers time.		
Business Analysis	Y	Four weeks of business analysis time.		
I raining Other:	Y	80 nours of time to train HR Office employees on new process.		
Technical				
Development & Implementation	Y			
Other:				
Ongoing Annual Real Costs				
Licensing	N			
Other:				
Ongoing Annual T&E Costs	Deerit	Depende on recommendations from outomal consultant during this project		
Other:	PUSSIDIE	Depends on recommendations from external consultant during this project.		
Julei.		1		

HR Process Improvement: Payroll					C	OST-BENEFI	IT CASH FLO	W
DISCLAIMER: Conceptual cost-benefit analysis	with an orde	er of magnite	ude estimate rar	nge between -5	0% to +100%.			
QUANTITATIVE BENEFITS								
	Rate/Hr	Hrs/Wk	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Increased Revenue								\$0
Materials Savings								\$0
Increased Labor Time & Effort (T&E) Capacity <sup>2</sup>								
1 Increased Distributed T&E Capacity	\$26		\$0	\$0	\$0	\$0	\$0	\$0
2 Increased Central T&E Capacity	\$24		\$0	\$0	\$0	\$0	\$0	\$0
3			\$0	\$0	\$0	\$0	\$0	\$0
4			\$0	\$0	\$0	\$0	\$0	\$0
Totals			\$0	\$0	\$0	\$0	\$0	\$0
COSTS								
	Rate/Hr	Total Hrs	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Upfront Real Costs								
Hardware Purchase (input individual years)								\$0
Software Purchase (input individual years)								\$0
Consulting Services (input individual years)			(\$14,400)					(\$14,400)
Other (input individual years)								\$0
Upfront T&E Costs <sup>2</sup>								
Functional								
Project Management <sup>3</sup>	\$38	240	(\$9,120)					(\$9,120)
Business Analysis <sup>3</sup>	\$38	160	(\$6,080)					(\$6,080)
Training <sup>4</sup>	\$26	80	(\$2,080)					(\$2,080)
Other:			\$0					\$0
Technical								
Development & Implementation			\$0					\$0
Other:			\$0					\$0
Ongoing Annual Real Costs								
Licensing			\$0	\$0	\$0	\$0	\$0	\$0
Other:			\$0	\$0	\$0	\$0	\$0	\$0
Ongoing Annual T&E Costs <sup>2</sup>								
Systems Maintenance			\$0	\$0	\$0	\$0	\$0	\$0
Other:			\$0	\$0	\$0	\$0	\$0	\$0
Totals			(\$31,680)	\$0	\$0	\$0	\$0	(\$31,680)

Assumptions:

Assumes a 6 month project process.

Assumes a 3% T&E increase per year for existing employees for increased salary and benefits costs as determined by the MSU Budget Office.

<sup>3</sup> Total hours are extrapolated from SunGuard Higher Education electronic document management and workflow proposal in 2009. Hourly rate is based on Banner Module Team Leader rate and includes 35% benefits.

<sup>4</sup> Total hours are extrapolated from SunGuard Higher Education electronic document management and workflow proposal in 2009. Hourly rate is extrapolated from OpenMSU service provider sample hourly rates and includes 35% benefits.

#### **HR Process Improvement: Payroll**

**COST-BENEFIT BOTTOM LINE** 

DISCLAIMER: Conceptual cost-benefit analysis with an order of magnitude estimate range between -50% to ⊩100%							
PERFORMANCE ANALYSIS (Values in this section reflect End of Period)							
Year	Annual Costs	Annual Benefits	Annual Cash Flow	<b>Overall Cash Flow</b>			
1	(\$31,680)	\$0	(\$31,680)	(\$31,680)			
2	\$0	\$0	\$0	(\$31,680)			

3	\$0	\$0	\$0	(\$31,680)
4	\$0	\$0	\$0	(\$31,680)
5	\$0	\$0	\$0	(\$31,680)
Totals	(\$31,680)	\$0	(\$31,680)	(\$31,680)
SUMMARY				
DISCOUNT RATE (%) :	5%			
NET PV:	(\$30,171.43)			
IRR:	NA for neg return			

#### Net PV (Net Present Value)

Calculation of the net present value of the project (or investment) is based on Annual Cash Flows and the above stated Discount Rate. The net present value of an investment is today's value of each Annual Cash Flow (Annual Cost -Annual Benefit), summed.

#### IRR (Internal Rate of Return)

IRR is the internal rate of return based on the Annnual Cash Flow. IRR requires an initial investment (negative value). So, if the project pays for itself before the end of the first year, the IRR cannot be calculated (without a negative value representing the initial investment). If all of the Annual Cash Flows are positive numbers (no apparent initial investment), an error will result (i.e., #NUM!).

#### Break-Even Analysis

The purpose of Break-Even Analysis is to discover when the project will pay for itself. The break even point can be calculated using the Break-Even Ratio followed by the Break Even Point Formulas.

In the following ratio formula, use the Annual and Overall Cash Flow values from the Break-Even Year, which is the first year that Annual Cash Flow is a positive number.

Brook Even Betie	Annual Cash Flow		
Break-Even Ratio =	Annual C		
Break-Even Point =	Break-Even Year - 1		

## **HR-Recruitment and Hiring**

	OpenM	ISU Proposa	al		
HR Process Improv	vement: Recruiting/Hirin	ng	STAC	GE	Prioritization
PROPOSAL OVERVI	EW				
Primary Contact	Anne Milkovich		Email	anne.milko	vich@montana.edu
Title/Department	Recommendations Sub-Comm	ttee Chair	Phone	(406) 994-5	5715
Problem Statement	According to the OpenMSU surverse recruiting/hiring processes. Eigh commented on recruiting/hiring	eys, there is signi ht out of twelve un processes as ne	ficant campus of its participating eding improver	demand for in OpenMS nent.	improved SU focus groups
Proposed Solution	Assign a project team of stakend with an external consultant to an onboarding. An external consultant and because we do not have the	olders, including alyze and improv ant is recomment staff capacity or	central and dist e recruiting pro- ded because H expertise to ade	tributed serv cesses from R processe equately red	<i>i</i> ce providers, to work n classification through s are inherently complex lesign HR processes.
Key Performance Indicators or Outcome Measures	Reduced time to hire Employee satisfaction with ease	e of use.			
General Time & Effort Required	MEDIUM. Exact figures to be det determine the current process s throughout Human Resources o	ermined in Desig tate. Moderate tra central and distrib	n phase. Effort lining, commun uted.	investment hication and	with consultant to adoption management
Alternative Solutions	Conduct a recruiting/hiring proce consultant.	ess improvement	project without	the assista	nce of an external
ALIGNMENT					
Data Support	Surveys Fo	cus Groups	Profession	onal Expertise	2
Initiative Objectives	✓ Operational Efficiency ✓ Em	ployee Satisfaction			
Departments Served	Image: Academic DeptsImage: Academic DeptsImage: Image: Image: Academic DeptsImage: Academic DeptsImage: Image: Image: Image: Academic DeptsImage: Academic DeptsImage: Image:	encies Central	<ul> <li>Fin &amp; Acct Cen</li> <li>Sponsored Pro-</li> </ul>	ıtral 🗹 grams 🗹	HR Central University Comm
Constituents Served	✓ Service Users       <1         ✓ Service Providers       <1	00	>500 <b>&gt;</b> >500 <b>&gt;</b> >500		
Problems Addressed	Paper process Customer se	ervice 🗹 Central/D ise 🗹 Staff capa	ist model 🔲 Lae acity 🗌 Alle	ck of integrat ocation/priorit	ion 🗹 Comm/Coord
Processes / Services Addressed	HR Recruiting Purchasing BPAs Budget/Fi	IT Supp	oort 🗌 Spons Payroll 🗌 I	ored Program F Governance	B     Web Dev & Content       e     Employee Relations
COST-EFFECTIVENE	SS				
DISCLAIMER: Conceptual	cost-benefit analysis with an or	der of magnitude	e estimate rang	ge between	-50%to +100%
Upfront Real Cost	\$ 7,20	0 Upt	ront T&E Cost	\$	8,600
Ongoing Annual Cost	\$	Ongoing An	nual T&E Cost	\$	-
Benefits	Cash Savings 🗹 Incr. capacity	Estim	ated New Net	\$	(15,100) *
COMMENTS AND RE	COMMENDATIONS				
Alignment Rating	65% Cost-Effectivene	ss Rating 75%	P	robability of	f Success Rating 55%
<ul> <li>Autoougn it is probable the percentage reduction to re</li> <li>**Probability of success is</li> <li>This proposal is rated conditioninternal resources as much</li> </ul>	at a process improvement project sult from process improvement i dependent on leadership comm tingent on the project team deter ch as possible and only utilizing a	ct would lead to in s unknown at this itment & being fu mining what reso in external hired c	icreased time & s time. Illy resourced. Jurces are need consultant if dee	≰ епоrt сара led to solve emed neces	city, the estimated the problem, utilizing ssary.

- **Reduce cycle times-** implement processes that are completed over a shorter period of time and take less service provider time.
- **Coordinate activities-** implement processes that improve coordination between central and distributed service providers.
- **Increase capacity-** implement processes that take less service provider time to create additional service provider capacity.
- Improve service provider satisfaction- meet campus demand for improved recruiting/hiring processes.
- Improve service customer satisfaction- meet campus demand for improved HR processes.

#### **Supporting Data**

- In response to the OpenMSU Service Provider Survey:
  - 23% of responses (105 comments) commented that recruiting/hiring was an activity that took significantly longer than it should at MSU. This was the most comments for any activity in response to this question.
  - 12% of responses (45 comments) commented that recruiting/hiring was the process most critical to change and/or streamline at MSU. This was tied (with BPA) for the most comments for any process in response to this question.
  - 5% of responses (18 comments) commented that HR processes overall were the processes most critical to change and/or streamline at MSU. This was the fourth most comments for any process in response to this question.
- In response to the OpenMSU Service Customer Survey, 28 out of 80 process overall themed comments (processes take too long, too difficult, duplicate effort, paper/manual) were about the HR function.
- The University of California, San Diego's benchmark for its average cycle time for "# Days Positions are Open until Hiring Offer is extend (work days)" is about 61 days. For FY 2011, MSU's combined average # days to offer (for classified staff) or hire (for faculty and professional staff) was about 66 days.

#### **Detailed Problem Statement**

According to the OpenMSU surveys, there is significant campus demand for improved recruiting/hiring processes. Eight out of twelve units participating in OpenMSU focus groups commented on recruiting/hiring processes as needing improvement.

#### **Detailed Solution Statement**

Assign a project team of stakeholders, including central and distributed service providers, to work with an external consultant to analyze and improve recruiting and hiring processes from classification through onboarding. An external consultant is recommended because HR processes are inherently complex and because MSU does not currently have the staff capacity or expertise to adequately redesign HR processes.

Although purchase and implementation of applicant tracking software is currently underway that should improve recruiting/hiring processes, technology enhancements must be accompanied by process improvements to be effective. According to Bill Gates, founder of Microsoft, "The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency."

#### Alternative Solution

Conduct a recruiting/hiring process improvement project without the assistance of an external consultant.

HR Process Improver	nent: Rec	ruiting/Hiring COST-BENEFIT SUMMARY			
DISCLAIMER: Conceptual cost-benefit analysi	s with an or	der of magnitude estimation range between -50% to +100%			
QUANTITATIVE BENEFITS					
	Applicable (Y, N Probable,	Additional Info			
	Possible)				
Increased Revenue	N				
Materials Savings	N				
Increased Labor Time & Effort (T&E) Capacity	Probable				
1 Increased Distributed T&E Capacity		OpenMSU Functional Activity Analysis preliminary results estimate the following as-is distributed time: 349 new employees (from searches) per year and about 28 hours hands-on time per new employee, resulting in total annual time of about 9,772 hours or the equivalent of about 5 FTE. The estimated percentage reduction to result from process improvement is unknown.			
2 Reduced Central T&E Capacity		Estimated as-is central time could not be obtained and estimated percentage reduction to result from process improvement is unknown			
QUALITATIVE BENEFITS					
Benefit		Additional Info			
Denent					
1 Reduce cycle times		Implement processes that are completed over a shorter period of time and take less service provider time. The University of California, San Diego's benchmark for its average cycle time for "# Days Positions are Open until Hiring Offer is extend (work days)" is about 61 days. For FY 2011, MSU's combined average # days to offer (for classified staff) or hire (for faculty and professional staff) was about 66 days. Based on that benchmark, it appears MSU has room for improvement.			
2 Coordinate activities		Implement processes that improve coordination between central and distributed service provider			
3 Increase capacity		Implement processes that take less service provider time to create additional service provider capacity.			
4 Improve service provider satisfaction		Meet campus demand for improved recruiting/hiring processes.			
5 Improve service customer satisfaction		Meet campus demand for improved HR processes.			
COSTS					
	Applicable (Y, N Probable, Possible)	Additional Info			
Upfront Real Costs					
Hardware Purchase	N				
Software Purchase	N				
Consulting Services	Y	40 nours at \$180/nour			
Unfront TSE Costo	Possible				
Eunetional					
Project Management	V	Three weeks of a project managers time			
	v v	Two weeks of husiness analysis time			
Training	v v	40 hours of time to train HR Office employees on new process			
Other:					
Technical					
Development & Implementation	N				
Other:	Possible				
Ongoing Annual Real Costs					
Licensing	N				
Other:	N				
Ongoing Annual T&E Costs					
Systems Maintenance	N				
Other:	N				

HR Process Improvement: Recruiting/Hiring COST-BENEFIT CASH FLOW							W	
DISCLAIMER: Conceptual cost-benefit analysis	with an orde	er of magnit	ude estimate rar	nge between -5	0% to +100%			
QUANTITATIVE BENEFITS								
	Rate/Hr	Hrs/Wk	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Increased Revenue								\$0
Materials Savings								\$0
Increased Labor Time & Effort (T&E) Capacity 2								
1 Increased Distributed T&E Capacity	\$26		\$0	\$0	\$0	\$0	\$0	\$0
2 Increased Central T&E Capacity	\$24		\$0	\$0	\$0	\$0	\$0	\$0
3			\$0	\$0	\$0	\$0	\$0	\$0
4			\$0	\$0	\$0	\$0	\$0	\$0
Totals			\$0	\$0	\$0	\$0	\$0	\$0
COSTS								
	Rate/Hr	Total Hrs	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Upfront Real Costs								
Hardware Purchase (input individual years)								\$0
Software Purchase (input individual years)								\$0
Consulting Services (input individual years)			(\$7,200)					(\$7,200)
Other (input individual years)								\$0
Upfront T&E Costs <sup>2</sup>								
Functional								
Project Management <sup>3</sup>	\$38	120	(\$4,560)					(\$4,560)
Business Analysis <sup>3</sup>	\$38	80	(\$3,040)					(\$3,040)
Training <sup>4</sup>	\$26	40	(\$1,040)					(\$1,040)
Other:			\$0					\$0
Technical			1	1	1	1	1	
Development & Implementation			\$0					\$0
Other:			\$0					\$0
Ongoing Annual Real Costs								
Licensing			\$0	\$0	\$0	\$0	\$0	\$0
Other:			\$0	\$0	\$0	\$0	\$0	\$0
Ongoing Annual T&E Costs <sup>2</sup>								
Systems Maintenance			\$0	\$0	\$0	\$0	\$0	\$0
Other:			\$0	\$0	\$0	\$0	\$0	\$0
Totals			(\$15,840)	\$0	\$0	\$0	\$0	(\$15,840)

Assumptions:

<sup>1</sup> Assumes a 6 month project process.

<sup>2</sup> Assumes a 3% T&E increase per year for existing employees for increased salary and benefits costs as determined by the MSU Budget Office.

<sup>3</sup> Total hours are extrapolated from SunGuard Higher Education electronic document management and workflow proposal in 2009. Hourly rate is based on Banner Module Team Leader rate and includes 35% benefits.

<sup>4</sup> Total hours are extrapolated from SunGuard Higher Education electronic document management and workflow proposal in 2009. Hourly rate is extrapolated from OpenMSU service provider sample hourly rates and includes 35% benefits.

#### HR Process Improvement: Recruiting/Hiring

**COST-BENEFIT BOTTOM LINE** 

# DISCLAIMER: Conceptual cost-benefit analysis with an order of magnitude estimate range between -50% to +100%.

PERFORMANCE ANALYSIS (Values in this section reflect End of Period)							
Year	Annual Costs	Annual Benefits	Annual Cash Flow	Overall Cash Flow			
1	(\$15,840)	\$0	(\$15,840)	(\$15,840)			
2	\$0	\$0	\$0	(\$15,840)			
3	\$0	\$0	\$0	(\$15,840)			
4	<b>\$</b> 0	\$0	\$0	(\$15,840)			
5	<b>\$</b> 0	\$0	\$0	(\$15,840)			
Totals	(\$15,840)	\$0	(\$15,840)	(\$15,840)			
SUMMARY							
DISCOUNT RATE (%) :	5%						
NET PV:	(\$15,085.71)						
IRR:	#NUM!						

#### Net PV (Net Present Value)

Calculation of the net present value of the project (or investment) is based on Annual Cash Flows and the above stated Discount Rate. The net present value of an investment is <u>today's</u> value of each Annual Cash Flow (Annual Cost - Annual Benefit), summed.

#### IRR (Internal Rate of Return)

IRR is the internal rate of return based on the Annual Cash Flow. IRR requires an initial investment (negative value). So, if the project pays for itself before the end of the first year, the IRR cannot be calculated (without a negative value representing the initial investment). If all of the Annual Cash Flows are positive numbers (no apparent initial investment), an error will result (i.e., #NUM!).

#### Break-Even Analysis

The purpose of Break-Even Analysis is to discover when the project will pay for itself. The break even point can be calculated using the Break-Even Ratio followed by the Break Even Point Formulas.

In the following ratio formula, use the Annual and Overall Cash Flow values from the Break-Even Year, which is the first year that Annual Cash Flow is a positive number.

Brook Evon Potio	Annual Cash Flow			
Break-Even Ratio =	Annual (			
Break-Even Point =	Break-Even Year - 1 + Break Even Ratio			

## Purchasing

		OpenMSU Propos	OpenMSU Proposal						
<b>Purchasing Proces</b>	ss Improvement		STAG	E	Prioritization	n			
PROPOSAL OVERVIE	EW								
Primary Contact	Brian O'Connor		Email b	brian.ocon	nor@montana.edu	1			
Title/Department	Purchasing Director		Phone (	(406) 994-	-5016				
Problem Statement	The OpenMSU Service central office in 3 catego personnel issues. A 10 organizational issues.	Provider Survey indicates ories: paper-based syster 0% turnover presents an	dissatisfaction w ms; compliance- opportunity to add	vith purcha driven rath dress both	ases that flow throu ner than value-add; h process and	gh the			
Proposed Solution	Hold a purchasing sum including appropriate le paper-based delays. Im	mit to collaborate on purc ivel of support staff. Imple iplement more collaborat	chasing processe ment electronic v ive shared purch	es and org workflow p lasing con	ganizational structu processes to allevia itracts.	re, ite			
Key Performance Indicators or Outcome Measures	Reduced time to approv Employee satisfaction v Increased savings from	<i>i</i> e a purchase with ease of use collaborative purchasing	]						
General Time & Effort Required	SMALL-MEDIUM. Deper Concept clearance. Mor and adoption managen campus.	ndent on Doc Mgt and Wo derate implementation an nent within the Purchasin	rkflow. Exact figu ıd training on nev g Department an	res to be o w software d distribut	determined upon . Limited communi ted purchasing on	cation			
Alternative Solutions	Hire an external consul	Hire an external consultant to evaluate processes and recommend solutions.							
ALIGNMENT									
Data Support	Surveys	Focus Groups	Profession	nalExpertis	se				
Initiative Objectives	Operational Efficiency	Employee Satisfaction	1						
Departments Served	<ul> <li>Academic Depts</li> <li>IT Central</li> </ul>	<ul><li>✓ Agencies</li><li>✓ Purchasing Central</li></ul>	<ul> <li>Fin &amp; Acct Centre</li> <li>Sponsored Prog</li> </ul>	iral 🗹 grams 🗹	HR Central				
Constituents Served	<ul><li>Service Users</li><li>Service Providers</li></ul>	✓<100       100-500         ✓<100       100-500	0						
Problems Addressed	✓ Paper process       ✓ Cu         ✓ Redundancy       St	ustomer service ✔ Central/D aff expertise	Dist model 🔲 Lack acity 🗌 Alloo	k of integra cation/prior	tion 🔽 Comm/Co	oord Sation			
Processes / Services Addressed	HR Recruiting	Purchasing IT Supp Budget/Finance EPAFs,	port 🗌 Sponso /Payroll 🗌 IT	ored Prograr Governanc	ms 🗌 Web Dev & Co e 🗌 Employee Rela	ontent ations			
COST-EFFECTIVENE	SS								
DISCLAIMER: This solution	n requires minimal time	and effort by staff, cost	-benefit analysis	s was not	conducted.				
Upfront Real Cost	\$	- Up	front T&E Cost	\$	-				
Ongoing Annual Cost	\$	- Ongoing Ar	nnual T&E Cost	\$	-				
Benefits	Cash Savings 🗌 Inc	r. capacity Estim	nated New Net	\$	-				
COMMENTS AND RE	COMMENDATIONS								
Alignment Rating	35% Cost-Eff	ectiveness Rating 70%	Pr	obability o	of Success Rating	55%			
*Probability of changing the education of compliance la **Probability of success is	e state law is low, but the aws) is fairly high. dependent on leadersh	e probability of improving ip commitment & being fu	the process to poully resourced.	eople's sa	itisfaction (along wi	th			
#### **OpenMSU Objectives Addressed**

- Reduce cycle times- reduce time for purchasing processes.
- Coordinate activities- implement processes that improve coordination between central and distributed service providers.
- Increase capacity- implement processes that take less service provider time to create additional service provider capacity.
- Improve service provider satisfaction- meet campus demand for improved purchasing processes.
- Improve service customer satisfaction- meet campus demand for improved purchasing processes.

#### **Supporting Data**

- In response to the OpenMSU Service Provider Survey:
  - 7% of responses (32 comments) commented that purchasing processes were activities that took significantly longer than they should at MSU. This was the third most comments for any activity in response to this question.
  - 4% of responses (15 comments) commented that purchasing processes were the most critical processes to change and/or streamline at MSU. This was the fifth most comments for any process in response to this question.
- In response to the OpenMSU Service Customer Survey, 21 out of 80 process overall (take too long, too difficult, duplicate effort, paper/manual) themed comments were about the purchasing function.
- Purchasing at MSU is fragmented across about 11,400 vendors with spending of about \$8,800 per vendor. According to UC Berkeley's Operational Excellence Diagnostic Report, an external benchmark for university purchasing functions is 6,000 vendors with spending of about \$140,000 per vendor.

#### **Detailed Problem Statement**

According to the OpenMSU surveys, there is significant campus demand for improved purchasing processes.

There are two separate and distinct avenues for purchasing at MSU—those purchases that need to be approved by the central Purchasing Department and those that do not.

Concerns voiced by in the OpenMSU Service Provider Survey indicate dissatisfaction with purchases that flow through the central office in three main areas:

- Paper-based systems that lend themselves to version control issues, lost paperwork, lack of timeliness and inefficiency in general.
- The Purchasing Departments is perceived as only a compliance office instead of a value-added office because of state guidelines that do not always align with the goals that MSU is looking to achieve.
- Personnel and staffing issues, including difficulty interpreting varying levels of regulation (state law, policy, procedure, and preference).

100% turnover in Purchasing Department staff presents the opportunity for a fresh perspective.

Furthermore, the large number of vendors that MSU uses (as can be seen in the supporting data section) is due to the decentralized nature of purchasing at MSU and is beyond the control of the Purchasing Department. This large number of vendors leads to inefficiencies such as time spent by MSU employees shopping for commonly purchased goods from multiple vendors and missed opportunities for university-wide, best priced strategic vendor contracts.

#### **Detailed Solution Statement**

Assign a cross-functional project team to assess and design new purchasing processes, prior to investigating opportunities for more university-wide strategic purchasing.

- Hold a purchasing summit to better identify the concerns of campus and collaborate on new purchasing processes and organizational structure, including appropriate level of support staff.
- Implement electronic workflow processes to alleviate delays caused by paper-based processes.
- Investigate a purchasing workflow module or alternative software to support the process.
- As a secondary phase, investigate more university-wide strategic purchasing to decrease the number of vendors used for similar purchases through tactics such as making better use of purchasing cooperatives and master contracts.

#### **Alternative solutions**

- Implement an e-procurement solution such as SciQuest prior to process evaluation. Emory University has realized a 6-to-1 return on its investment in SciQuest's procurement automation software. It found that of the savings realized, approximately 45% was driven from process efficiencies and 55% from negotiated discounts and contract compliance.
- Other ideas for improving purchasing can be found on the UC Berkeley Operational Excellence site at: <u>http://oe.berkeley.edu/dpreports/documents/P\_BusCase\_050211\_v11.pdf</u>

#### **Cost-Benefit Analysis**

A cost-benefit analysis was not conducted for the primary solution because the project is less defined and therefore not quantifiable. The primary solution involves minimal time and effort of purchasing staff both central and distributed.

A cost-benefit analysis was conducted for the secondary phase e-procurement solution.

Purchasing Process Ir	nproveme	nt: e-Procurement COST-BENEFIT SUMMARY		
DISCLAIMER: Conceptual cost-benefit an	nalysis with a	n order of magnitude estimate range between -50% to +100%.		
QUANTITATIVE BENEFITS				
	Applicable (Y, N Probable, Possible)	Additional Info		
Increased Revenue	N			
Materials Savings	Possible	Paper, toner, ink. Storage space. Not yet quantifiable.		
Labor Time & Effort (T&E) Savings	Possible			
1 Reduced Distributed T&E	-	2% most conservative estimate in e-procurement industry relevant publications located.		
		2% most conservative estimate in e-procurement industry relevant publications located.		
QUALITATIVE BENEFITS	_			
Benefit		Additional Info		
1 Reduce cycle times		Reduce time for purchasing processes.		
2 Coordinate activities		Implement processes that improve coordination between central and distributed service providers.		
3 Increase capacity		Implement processes that take less service provider time to create additional service provider capacity.		
4 Improve service provider satisfaction		Meet campus demand for improved purchasing processes.		
5 Improve service customer satisfaction		Meet campus demand for improved purchasing processes.		
COSTS				
COSTS	Applicable (Y, N Probable, Possible)	Additional Info		
COSTS Upfront Real Costs	Applicable (Y, N Probable, Possible)	Additional Info		
Upfront Real Costs Hardware Purchase	Applicable (Y, N Probable, Possible) Possible	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
Upfront Real Costs Hardware Purchase Software Purchase	Applicable (Y, N Probable, Possible) Possible	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
COSTS Upfront Real Costs Hardware Purchase Software Purchase Consulting Services	Applicable (Y, N Probable, Possible) Possible Y	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
COSTS Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other:	Applicable (Y, N Probable, Possible) Possible Possible Y	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs	Applicable (Y, N Probable, Possible) Possible Y	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs Functional	Applicable (Y, N Probable, Possible) Possible Y	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
COSTS Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs Functional Project Management	Applicable (Y, N Probable, Possible) Possible Y Possible	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Not yet quantifiable. Not yet quantifiable.		
COSTS Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs Functional Project Management Business Analysis Training	Applicable (Y, N Probable, Possible) Possible Y Possible Y Probable Probable	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Not yet quantifiable. Not yet quantifiable. Not yet quantifiable. Not wet quantifiable. Not wet quantifiable.		
Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs Functional Project Management Business Analysis Training	Applicable (Y, N Probable, Possible) Possible Y Possible Y Probable Probable Probable	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
COSTS Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs Functional Project Management Business Analysis Training Other: Technical	Applicable (Y, N Probable, Possible Possible Y Possible Y Probable Probable Probable	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs Functional Project Management Business Analysis Training Other: Technical Development & Implementation	Applicable (Y, N Probable, Possible) Possible Y Possible Y Probable Probable Probable	Additional Info         Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.         Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.         Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
COSTS Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs Functional Project Management Business Analysis Training Other: Technical Development & Implementation Other:	Applicable (Y, N Probable, Possible Possible Y Possible Probable Probable Probable	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Not yet quantifiable. Not yet quantifiable. Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs Functional Project Management Business Analysis Training Other: Technical Development & Implementation Other: Ongoing Annual Real Costs	Applicable (Y, N Probable, Possible Possible Y Probable Probable Probable Probable	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Not yet quantifiable. Not yet quantifiable. Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs Functional Project Management Business Analysis Training Other: Technical Development & Implementation Other: Ongoing Annual Real Costs Licensing	Applicable (Y, N Probable, Possible) Possible Possible Y Probable Probable Probable	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Not yet quantifiable. Not yet quantifiable. Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
COSTS Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs Functional Project Management Business Analysis Training Other: Technical Development & Implementation Other: Ongoing Annual Real Costs Licensing Other:	Applicable (Y, N Probable, Possible) Possible Possible Y Probable Probable Probable Probable	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Not yet quantifiable. Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
COSTS Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs Functional Project Management Business Analysis Training Other: Technical Development & Implementation Other: Ongoing Annual Real Costs Licensing Other: Ongoing Annual T&E Costs	Applicable (Y, N Probable, Possible) Possible Possible Y Probable Probable Probable Probable	Additional Info Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Not yet quantifiable. Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable. Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		
COSTS Upfront Real Costs Hardware Purchase Software Purchase Consulting Services Other: Upfront T&E Costs Functional Project Management Business Analysis Training Other: Technical Development & Implementation Other: Ongoing Annual Real Costs Licensing Other: Ongoing Annual T&E Costs Systems Maintenance	Applicable (Y, N Probable, Possible) Possible Possible Y Probable Probable Probable Probable Probable N N Possible	Additional Info         Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.         Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.         Not yet quantifiable.         Not yet quantifiable.         Not yet quantifiable.         Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.         Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.         Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.         Depends on e-procurement solution type (e.g., software as a service). Not yet quantifiable.		

Purchasing Process Improvement: e-Procurement COST-BENEFIT CASH FLOW							N	
DISCLAIMER: Conceptual cost-benefit analys	is with an or	rder of magr	nitude estimation	range betwee	n -50% to +100%	o.		
QUANTITATIVE BENEFITS								
	Rate/Hr	Hrs/Wk	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Increased Revenue								\$0
Materials Savings								\$0
Product Cost Savings <sup>3</sup>			\$304,819	\$303,897	\$302,978	\$302,062	\$301,149	\$1,514,906
Time & Effort (T&E) Capacity Increase <sup>2</sup>								
1 Distributed T&E <sup>4</sup>	\$26	0.46	\$313	\$645	\$664	\$684	\$704	\$3,010
2 Central T&E <sup>5</sup>	\$31	2	\$1,934	\$3,984	\$4,103	\$4,226	\$4,353	\$18,601
3			\$0	\$0	\$0	\$0	\$0	\$0
4			\$0	\$0	\$0	\$0	\$0	\$0
Totals			\$307,066	\$308,526	\$307,746	\$306,973	\$306,206	\$1,536,517
COSTS								
	Rate/Hr	Total Hrs	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Upfront Real Costs <sup>6</sup>								
Hardware Purchase (input individual years)								\$0
Software Purchase (input individual years)								\$0
Consulting Services (input individual years)			(\$176,000)					(\$176,000)
Other (input individual years)								\$0
Upfront T&E Costs <sup>2</sup>								
Functional								
Project Management			\$0					\$0
Business Analysis			\$0					\$0
Training			\$0					\$0
Other:			\$0					\$0
Technical								
Development & Implementation	'		\$0					\$0
Other:			\$0					\$0
Ongoing Annual Real Costs								
Licensing <sup>6</sup>	\$145,000	1	(\$72,500)	(\$145,000)	(\$145,000)	(\$145,000)	(\$145,000)	(\$652,500)
Other:			\$0	\$0	\$0	\$0	\$0	\$0
Ongoing Annual T&E Costs <sup>2</sup>								
Systems Maintenance			\$0	\$0	\$0	\$0	\$0	\$0
Other:	'		\$0	\$0	\$0	\$0	\$0	\$0
Totals	<u> </u>		(\$248,500)	(\$145,000)	(\$145,000)	(\$145,000)	(\$145,000)	(\$828,500)

Assumptions:

Assumes a 6 month Project Process.

Assumes a 3% T&E increase per year for existing employees for increased salary and benefits costs as determined by the MSU Budget Office.

<sup>3</sup> Extrapolated as a percentage of purchasing dollar volume. Assumes a 4.8% cost reduction applied to 6.3% of total costs for FY11 in year one, continuing a similar application to prior years in subsequent years. Total product costs are from a benchmarking analysis prepared for a recent MSU Responsible Purchasing project. Assumed percentages were the most conservative in relevant industry publications located. (\$304,819 = 4.8% X (6.3% X \$100.8M))

<sup>4</sup> Hourly rate is extrapolated from OpenMSU service provider sample hourly rates. Hours per week are extrapolated from OpenMSU Functional Activity Analysis Unit Time Estimates. Assumes a reduction percentage of 2% which was based on the most conservative rate in e-procurement industry relevant publications located.

<sup>5</sup> Hourly rate is extrapolated from average hourly rates for current MSU Purchasing Department personnel and includes 35% benefits. Hours per week are extrapolated from an assumed reduction percentage of 2%, which was based on the most conservative rate in e-procurement industry relevant publications located.

<sup>6</sup> Costs are estimates provided by the University of Montana which recently implemented e-procurement. Costs listed above include all costs from that estimate.

#### Purchasing Process Improvement: e-Procurement COST-BENEFIT BOTTOM LINE

# DISCLAIMER: Conceptual cost-benefit analysis with an order of magnitude estimation range between -50% to +100%.

PERFORMANCE ANALYSIS (Values in this section reflect End of Period)						
Year	Annual Costs	Annual Benefits	Annual Cash Flow	Overall Cash Flow		
1	(\$248,500)	\$307,066	\$58,566	\$58,566		
2	(\$145,000)	\$308,526	\$163,526	\$222,092		
3	(\$145,000)	\$307,746	\$162,746	\$384,838		
4	(\$145,000)	\$306,973	\$161,973	\$546,810		
5	(\$145,000)	\$306,206	\$161,206	\$708,017		
Totals	(\$828,500)	\$1,536,517	\$708,017	\$708,017		
SUMMARY						
DISCOUNT RATE (%) :	5%					
NET PV:	\$604,250.67					
IRR:	51%		· · · · · · · · · · · · · · · · · · ·			

#### Net PV (Net Present Value)

Calculation of the net present value of the project (or investment) is based on Annual Cash Flows and the above stated Discount Rate. The net present value of an investment is <u>today's</u> value of each Annual Cash Flow (Annual Cost - Annual Benefit), summed.

#### **IRR (Internal Rate of Return)**

IRR is the internal rate of return based on the Annual Cash Flow. IRR requires an initial investment (negative value). So, if the project pays for itself before the end of the first year, the IRR cannot be calculated (without a negative value representing the initial investment). If all of the Annual Cash Flows are positive numbers (no apparent initial investment), an error will result (i.e., #NUM!).

#### Break-Even Analysis

The purpose of Break-Even Analysis is to discover when the project will pay for itself. The break even point can be calculated using the Break-Even Ratio followed by the Break Even Point Formulas.

In the following ratio formula, use the Annual and Overall Cash Flow values from the Break-Even Year, which is the first year that Annual Cash Flow is a positive number.

	Break-Even Ratio =	Annual Cash Flow			
		Annual C			
	Break-Even Point =	Break-Even Year - 1 + Break Even Ratio			

### **Shared Services Model**

	OpenMSU Proposa	l							
Shared Services M	odel	STAGE Prioritization							
PROPOSAL OVERVI	EW								
Primary Contact	Anne Milkovich	Email anne.milkovich@montana.edu							
Title/Department	Recommendations Sub-Committee Chair	Phone (406) 994-5715							
Problem Statement	Administration is highly decentralized, with units ind functions. Unit-embedded functional support provid inefficiencies and organizational risk. Distributed s Better balance can be achieved between centralize	dependently covering a range of duplicate des customer-centric knowledge at a cost of pecialists are under-utilized by central offices. ad versus decentralized design.							
Proposed Solution	Create an administrative shared services center in seed money and unit contributions. Build the cente Integrate distributed functional specialists with cen roles and responsibilities to leverage their expertis	reate an administrative shared services center in A&F to support interested smaller units, funded by eed money and unit contributions. Build the center over time as attrition occurs and units opt in. htegrate distributed functional specialists with central functional specialists by defining workflows, oles and responsibilities to leverage their expertise, better load-balance across existing resources,							
Key Performance Indicators or Outcome Measures	Reduced process cycle timesStIncreased staff capacityStaImproved allocation of services among unitsImproved allocation of services among staff	Reduced process cycle times       Stable service provider satisfaction         Increased staff capacity       Stable service user satisfaction         Inproved allocation of services among units       mproved allocation of services among staff							
General Time & Effort Required	VERY LARGE. Dependent on Doc Mgt Workflow for best success and ease of use, interdependent with HR process improvements. Significant effort in development and implementation of the shared services system pilot. Moderate training.								
Alternative Solutions	Implement a shared service center among multiple units without a reporting line to Administration and Finance.								
ALIGNMENT									
Data Support	Surveys Focus Groups	✓ Professional Expertise							
Initiative Objectives	Operational Efficiency     Employee Satisfaction								
Departments Served	✓ Academic Depts       Agencies         ✓ IT Central       ✓ Purchasing Central	<ul> <li>Fin &amp; Acct Central</li> <li>Fin &amp; Acct Central</li> <li>Sponsored Programs</li> <li>University Comm</li> </ul>							
Constituents Served	✓ Service Users         <100         100-500           ✓ Service Providers         <100         100-500	✓         >500           ✓         >500							
Problems Addressed	<ul> <li>Paper process</li> <li>Customer service</li> <li>Central/Di</li> <li>Redundancy</li> <li>Staff expertise</li> <li>Staff capa</li> </ul>	ist model  Lack of integration  Comm/Coord acity Allocation/prioritization  Compensation							
Processes / Services Addressed	HR Recruiting     Purchasing     IT Supp       BPAs     Budget/Finance     EPAFs/F	vort         Sponsored Programs         Web Dev & Content           Payroll         IT Governance         Employee Relations							
	SS								
Upfront Real Cost	\$ 95,000 <b>Upf</b>	front T&E Cost \$ -							
Ongoing Annual Cost	\$ 110,000 <b>Ongoing An</b>	nual T&E Cost \$ -							
Benefits	Cash Savings 🖌 Incr. capacity Estim	ated New Net \$ (284,000)							
<b>COMMENTS AND RE</b>	COMMENDATIONS								
Alignment Rating	100% Cost-Effectiveness Rating 10%	Probability of Success Rating 10%							
Probability of success is dependent on leadership commitment & being fully resourced as well as a formal customer service program. THIS PROPOSAL IS PRIORITIZED CONTINGENT UPON: This solution is fundamental to other solutions just as EDMW s. It will only work if carefully and correctly designed and planned. A project team must be assigned to investigate and design his program carefully and thoroughly and report frequently to OpenMSU program management. This model needs to be adapted to different unit needs and ensure the balance of embedded customer service and central expertise.									

#### **OpenMSU Objectives Addressed**

- **Increase capacity-** through standardized processes, error reduction from greater specialization and reduction of transaction volume.
- Reduce cycle times- standardize processes.
- **Coordinate activities-** implement shared services with defined relationships to central functions to improve coordination between central and distributed service providers.
- Improve allocation- share services to improve the allocation of services among MSU units.

#### **Supporting Data**

- MSU-Bozeman has about 140 units supported by central and distributed service providers in different functional disciplines:
  - Finance & accounting: about 130 total service providers with about 100 distributed (about 80%).
  - HR: about 30 total service providers with about 10 distributed (about 30%).
  - o IT: about 140 total service providers with about 85 distributed (about 60%).
  - Administrative associates: Many of the about 190 service providers are providing finance & accounting, HR and IT services.
- Larger units have more specialized functional staff; however, many units have a small number of generalists providing a combination of finance & accounting, HR, IT, purchasing, sponsored program administration, Web development and content management services in addition to general administration and academic support (such as assistance with advising).
- In response to the OpenMSU Service Provider Survey, the majority of respondents stated that they spend less than 50% of their time on any one function.
- According to organizational management principles, different organizational designs have different strengths and weaknesses. An optimal fit exists between organizational design and business needs. Organizations evolve over time and may digress away from optimal fit, requiring conscious effort to refit the design to better support business needs. (Donaldson, Lex. 2001. The Contingency Theory of Organizations. Sage Publications, Inc.: Foundations for Organizational Science.)
- A large land-grant university in the northwestern United States reported a significant decrease in routine errors from better trained, more specialized distributed staff. Centralized staff spent less time correcting and explaining and more time analyzing and directing (phone interview Spring of 2012). Other institutions report similar improvements with distributed shared services models.

#### **Detailed Problem Statement**

The MSU-Bozeman administrative organization has evolved into a highly decentralized structure, with units operating independently of each other covering a range of duplicate administrative functions. Unit-embedded functional support has the benefit of customer-centric knowledge at a cost of inefficiencies and organizational risk. Distributed specialist expertise could be leveraged to better support central offices. Better balance can be achieved between the trade-offs of centralized versus decentralized design.

Administrative roles are not consistently allocated to units based on volume. For example, smaller units may not have the need for a full-time administrative person but employ one because the alternative would be to have faculty or academic staff performing administrative duties. To fill out the fulltime capacity, duties are performed by administrative staff that might be better performed by others. The result is an inequitable distribution of administrative staff across large and small units.

Duplicating functions in each unit is inefficient for the institution overall. In smaller units, generalist staff must obtain more training to maintain the skills and knowledge necessary to cover a broader set of responsibilities. They perform many specialized tasks less frequently, with less expertise, and less efficiently than functional specialists. Functional services are fragmented across departments creating challenges with training, coordination, communication, equitable allocation and overwhelmed staff. Disparate software systems burden limited IT resources with duplication and prevent load sharing among functional staff. Lack of backup staff degrades service during absences and turnover and compounds risk.

In larger units, functional specialists have expertise that is often untapped by centralized departments. Lack of defined roles and collaboration between distributed specialists and centralized specialists causes duplication of effort. Additional specialized capacity is available that is not being leveraged, while limited capacity in the central offices causes bottlenecks and slow service.

Finally, a highly decentralized approach to functional support creates operational and compliance risks for the campus. Work is developed in different ways to accomplish the same tasks without always following the same standards and protocols. Staff may be performing specialized functional tasks without proper oversight, they are often without peers to rely upon for consultation and support, best practices and lessons learned are not shared, and staff development is not fostered. Lack of backup during normal or unplanned absences creates both mission risks and delays in service provision.

While a highly decentralized design is not optimal it has the advantage of customer-centric service and knowledge that would be lost in a fully centralized model. Generalist staff also report satisfaction with a variety of tasks to perform. For those reasons and for the practical lack of space, full centralization is not a good model for MSU but better balance can be achieved.

#### **Detailed Solution Statement**

Assign a project team of distributed and central stakeholders to build a Distributed Shared Services model based on best practices and lessons learned from other institutions:

- Create an administrative shared services center in A&F to support smaller units currently interested in better coverage with more efficient use of funding for their vacant positions.
  - Recruit a manager and 1-2 functional staff from internal or external candidates.
  - Build the shared services center over time as attrition occurs and units opt in.
  - Fund the center with initial seed money from A&F and from participating unit contributions at lower cost than filling their vacancies independently.
- Integrate distributed functional specialists with central functional specialists by defining workflows, roles
  and responsibilities to leverage their expertise, better load-balance across existing resources, and reduce
  the bottlenecks in central offices.

#### **Alternative solutions**

 Implement a shared service center among multiple units without a reporting line to Administration and Finance.

Shared Serv	vices Cent	er Pilot COST-BENEFIT SUMMARY		
DISCLAIMER: Hypothetical cost-benefit a	nalysis. Estii	mates are only for demonstration purposes.		
QUANTITATIVE BENEFITS				
	Applicable (Y, N Probable, Possible)	Additional Info		
Increased Revenue	N			
Materials Savings	N			
Labor Time & Effort (T&E) Savings				
Reduced Distributed T&E	Y	Standardized processes. Error reduction from greater specialization. Reduction of transaction volumes.		
2 Reduced Central T&E	N			
QUALITATIVE BENEFITS				
Benefit		Additional Info		
1 Increase capacity		Increase capacity through standardized processes, error reduction from greater specialization and reduction of transaction volume.		
2 Reduce cycle times		Standardize processes.		
2 Coordinate activities		Implement shared services with defined relationships to central functions to improve coordination between central and distributed service providers.		
3 Improve allocation		Share services to improve the allocation of services among MSU units.		
COSTS				
	Applicable (Y, N Probable, Possible)	Additional Info		
Upfront Real Costs				
Hardware Purchase	Y			
Software Purchase	Y Y			
Consulting Services	Y N			
Other:	IN			
Upfront T&E Costs				
Functional				
Project Management	N			
Business Analysis	Possible	Not yet quantifiable		
Training	N			
Other:				
Technical				
Development & Implementation	Possible	Not yet quantifiable		
Other:				
Salarias & banafits: Director	V	Administration & Finance Division new position		
Supplies training & misc oper	T V			
Office space	Probable	Not yet guantifiable		
Licensing	N			
Other:				
Ongoing Annual T&E Costs				
Salaries & benefits: Staff	Possible	Ongoing costs would be shifting of current costs but not new costs.		
Systems Maintenance	N			
Other:				

Shared Services Center Pilot					C	OST-BENEFI	T CASH FLO	W
DISCLAIMER: Hypothetical cost-benefit analysis. Estim	ates are onl	y for demon	stration purpose	IS.				
QUANTITATIVE BENEFITS								
	Rate/Hr	Hrs/Wk	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Increased Revenue								\$0
Materials Savings								\$0
Labor Time & Effort (T&E) Capacity Increase <sup>2</sup>								
1 Distributed T&E Capacity Increase <sup>3</sup>	\$26	32	\$21,605	\$44,506	\$45,841	\$47,216	\$48,633	\$207,800
2			\$0	\$0	\$0	\$0	\$0	\$0
Totals			\$21,605	\$44,506	\$45,841	\$47,216	\$48,633	\$207,800
COSTS								
	Cost or Cost/Ee	Total Ees	Year 1 <sup>1</sup>	Year 2	Year 3	Year 4	Year 5	Totals
Upfront Real Costs								
Hardware Purchase (input individual years) 6	\$3,960	8	(\$31,680)					(\$31,680)
Software Purchase (input individual years) <sup>7</sup>	\$200	8	(\$1,600)					(\$1,600)
Furniture Purchase (input individual years) <sup>8</sup>	\$1,250	8	(\$10,000)					(\$10,000)
Upfront T&E Costs <sup>2</sup>								,
Functional								
Project Management			\$0					\$0
Business Analysis			\$0					\$0
Training			\$0					\$0
Other:			\$0					\$0
Technical								
Development & Implementation			\$0					\$0
Other:			\$0					\$0
Ongoing Annual Real Costs								
Salaries & benefits: Director (new position) ***	\$89,100	1	(\$44,550)	(\$91,773)	(\$94,526)	(\$97,362)	(\$100,283)	(\$428,494)
Supplies, training & misc. opex <sup>5</sup>	\$14,000		(\$7,000)	(\$14,000)	(\$14,000)	(\$14,000)	(\$14,000)	(\$63,000)
Office space <sup>9</sup>			\$0	\$0	\$0	\$0	\$0	\$0
Licensing			\$0	\$0	\$0	\$0	\$0	\$0
Other:			\$0	\$0	\$0	\$0	\$0	\$0
Ongoing Annual T&E Costs <sup>2</sup>								
Systems Maintenance			\$0	\$0	\$0	\$0	\$0	\$0
Other:			\$0	\$0	\$0	\$0	\$0	\$0
Totals			(\$94,830)	(\$105,773)	(\$108,526)	(\$111,362)	(\$114,283)	(\$534,774)

Assumptions:

<sup>1</sup> Assumes a 6 month Project Process.

Assumes a 3% T&E increase per year for existing employees for increased salary and benefits costs as determined by the MSU Budget Office.

<sup>3</sup> Hourly rate is extrapolated from OpenMSU service provider sample hourly rates (35% for benefits is included in the rate). Distributed T&E capacity hours/week increase is based on the average workload (OpenMSU Functional Activity Analysis activity volumes and average estimated times per activity) for MSU's seven original colleges for the following activities (Selected activities are based on a NACUBO shared services webinar):

• Finance & Accounting: index monthly reconciliation (and corrections) and accounts payable by Banner Payment Authorization (BPA)

• HR: new hire forms and orientation, international hire employability verification, timesheet monitoring and Electronic Personnel Action Form (EPAF) processing

• Sponsored Programs Administration: monitoring compliance with sponsoring agency requirements, managing subawards, managing cost sharing and managing participant support. The time for this average workload correlates to eight FTE. The Educational Advisory Board's "Making the Case for Shared Services" states that shared services typically result in cost reductions of 10-30%. Distributed T&E capacity increase is based on a 10% reduction in the time currently needed to conduct the activities listed above.

<sup>4</sup> Educational Advisory Board Director of Shared Service Job Description range of \$66,000-\$112,000. Assumed low end of range plus 35% for benefit costs.

Based on a small (3.5 FTE) MSU unit: 62100 (\$1,400), 62225 (\$250), 62290 (\$3,500), 62300 (\$1,500), 62400 (\$2,000) and 62800 (\$7,000), rounded to the nearest thousand.

<sup>6</sup> IT Store hardware pricing (10/3/12) for a Performance System with 22" Professional Display (\$1,075) and a second 22" Professional Display (\$187) for a total of 1,260/ee.

HP LaserJet Enterprise 500 color MFP M575f printer/scanner for \$2,700.

IT Store software pricing (10/5/12) for Acrobat X Pro (\$75), Office 2012 (\$55) and Visio Premium 2010 (\$69), rounded to nearest hundred.

Desk and chair cost based on recent actual purchase by two MSU departments.

Costs were not assigned for office space, however, space resources should be considered.

Shared Services Center Pilot			COST-BENEFIT BOTTOM LINE				
DISCLAIMER: Hypothetical cost-benefit analysis. Estimates are only for demonstration purposes.							
PERFORMANCE ANA	PERFORMANCE ANALYSIS (Values in this section reflect End of Period)						
Year	Annual Costs	Annual Benefits	Annual Cash Flow	Overall Cash Flow			
1	(\$94,830)	\$21,605	(\$73,225)	(\$73,225)			
2	(\$105,773)	\$44,506	(\$61,267)	(\$134,493)			
3	(\$108,526)	\$45,841	(\$62,685)	(\$197,178)			
4	(\$111,362)	\$47,216	(\$64,146)	(\$261,324)			
5	(\$114,283)	\$48,633	(\$65,650)	(\$326,974)			
Totals	(\$534,774)	\$207,800	(\$326,974)	(\$326,974)			
SUMMARY							
DISCOUNT RATE (%) :	5%						
NET PV:	(\$283,671.10)						
IRR:	N/A for neg return						

#### Net PV (Net Present Value)

Calculation of the net present value of the project (or investment) is based on Annual Cash Flows and the above stated Discount Rate. The net present value of an investment is <u>today's</u> value of each Annual Cash Flow (Annual Cost - Annual Benefit), summed.

#### IRR (Internal Rate of Return)

IRR is the internal rate of return based on the Annual Cash Flow. IRR requires an initial investment (negative value). So, if the project pays for itself before the end of the first year, the IRR cannot be calculated (without a negative value representing the initial investment). If all of the Annual Cash Flows are positive numbers (no apparent initial investment), an error will result (i.e., #NUM!).

#### **Break-Even Analysis**

The purpose of Break-Even Analysis is to discover when the project will pay for itself. The break even point can be calculated using the Break-Even Ratio followed by the Break Even Point Formulas.

In the following ratio formula, use the Annual and Overall Cash Flow values from the Break-Even Year, which is the first year that Annual Cash Flow is a positive number.

Broak-Evon Patio -	Annual Cash Flow			
Break-Even Ratio =	Annual C			
Break-Even Point =	Break-Even Year - 1	+ Brea	ak Even Ratio	

### **Service Provider Development**

	OpenMS	J Proposal						
Service Provider D	evelopment	STA	GE Prioritization					
PROPOSAL OVERVI	EW							
Primary Contact	Dennis DeFa	Email	dennis.defa@montana.edu					
Title/Department	Chief Human Resource Officer	Phone						
Problem Statement	MSU does not have a means to ens track that training has been received it is of adequate quality. Minimal train available to support a high-performa	ure that service providers ar , to assess that the right training is provided by some fur nnce culture, such as training	e getting the training they need, to ning is being provided or to ensure nctional areas. Few programs are g in unit performance management.					
Proposed Solution	Assign a project team to assist in th HR Office as it applies to OpenMSU sponsored programs, Web develop	e development of the training service providers in finance ment, content management.	g program currently underway in the , accounting, HR, IT, purchasing,					
Key Performance Indicators or Outcome Measures	Employee satisfaction with quality a Availability of training records	Employee satisfaction with quality and quantity of training Availability of training records						
General Time & Effort Required	LARGE. No known dependencies. Exact figures undetermined. Significant development of a Professional Development and Training organization within the HR Office. Moderate communication and adoption management across campus. Limited maintenance.							
Alternative Solutions	<ol> <li>Establish an administrative council of central and distributed staff to guide operations such as training, staffing, standardized processes.</li> <li>Create a university-wide database to publish available training and track completion.</li> </ol>							
ALIGNMENT								
Data Support	Surveys Focus C	Groups 🗹 Professi	ional Expertise					
Initiative Objectives	Operational Efficiency Employ	ee Satisfaction						
Departments Served	<ul> <li>✓ Academic Depts</li> <li>✓ Agencie</li> <li>✓ IT Central</li> <li>✓ Purchas</li> </ul>	ing Central Sponsored Pro	ntral 🗹 HR Central ograms 🔽 University Comm					
Constituents Served	□ Service Users     □ <100	□ 100-500 □ >500 ✓ 100-500 □ >500						
Problems Addressed	Paper process         Customer service           Redundancy         Staff expertise	Central/Dist model □ La ✓ Staff capacity □ All	ck of integration					
Processes / Services Addressed	HR Recruiting     Purchasing       BPAs     Budget/Finance	✓ IT Support       ✓ Spons         He       ✓ EPAFs/Payroll       □ I	ored Programs 🔽 Web Dev & Content T Governance 🗌 Employee Relations					
COST-EFFECTIVENE	<b>S</b> S							
A cost-benefit analysis w	as not conducted because the proje	ect is less defined and there	efore not easily quantifiable.					
Upfront Real Cost	\$ -	Upfront T&E Cost	\$-					
Ongoing Annual Cost	\$ -	Ongoing Annual T&E Cost	\$-					
Benefits	Cash Savings 🗌 Incr. capacity	Estimated New Net	\$-					
COMMENTS AND RE	COMMENDATIONS							
Alignment Rating	80% Cost-Effectiveness I	Rating 80% F	Probability of Success Rating 70%					
*Probability of success is team be assigned to assis high cost-effectiveness. Pr organization in HR. Assum	<sup>1</sup> Probability of success is dependent on leadership commitment & being fully resourced. This solution proposes that a project eam be assigned to assist in shaping the development of the training program for service providers and is therefore low cost, high cost-effectiveness. Probability of success is dependent on collaboration between project/advisory team and training brogramization in HR. Assuming full commitment of HR, probability of success is high.							

#### **OpenMSU Objectives Addressed**

#### Enhance service provider development

#### **Supporting Data**

In response to the OpenMSU Service Provider Survey, there were 79 training themed comments, placing training in the top two of comment theme areas for this survey.

#### **Detailed Problem Statement**

MSU does not have a means to ensure that service providers are getting the training they need, to track that training has been received, to assess that the right training is being provided or to ensure it is of adequate quality.

Although some departments (UBS, Purchasing and OSP) regularly provide training on performing duties within their functions to distributed service providers, much of it is only provided a few times of year, and no training is provided to campus providers for some functions (such as for Web development and content management). Also, there are few training and professional development programs available that would support a high-performance culture, such as training in performance management and in using metrics to manage unit performance.

#### **Detailed Solution Statement**

Implement a Professional Development and Training organization as part of the HR Office as proposed by the Chief Human Resources Officer. Assign a project team to assist in the development of this organization as it would apply to service providers for OpenMSU functions (finance & accounting, HR, IT, purchasing, sponsored programs administration and Web development and content management).

#### **Alternative solutions**

- Establish an administrative council composed of central and distributed staff to guide university-wide administrative operations such as:
  - □ Ensuring that service providers are adequately and equitably compensated and that appropriate staffing levels are maintained,
  - □ Ensuring that development and training of service providers is effective,
  - □ Standardizing administrative processes and technologies (including whether processes should be conducted by central or distributed service providers), and
  - □ Responding to emerging regulations that affect administrative practices.
- Other ideas for improving training and professional development and instituting a high-performance culture can be found on the UC Berkeley Operational Excellence site at: http://oe.berkeley.edu/dpreports/documents/H TargetedTalentDev ResRegwithwatermark.pdf.

#### **Cost-Benefit Analysis**

A cost-benefit analysis was not conducted because the project is less defined and therefore not easily quantifiable.

### Service Provider Staffing and Turnover

	OpenMSU Propo	sal
Service Provider S	taffing & Turnover	STAGE Prioritization
PROPOSAL OVERVI	EW	
Primary Contact	Anne Milkovich	Email anne.milkovich@montana.edu
Title/Department	Recommendations Sub-Committee Chair	Phone (406) 994-5715
Problem Statement	According to CUPA and O*net benchmarks, MS distributed administrative functions experience pay and heavy workloads. High turnover costs t adverselv affects customer satisfaction and effi	SU staff are significantly underpaid. Central and high rates of turnover because of issues such as low the institution time and effort in training new hires and iciency.
Proposed Solution	Assign a project team of qualified staff working range staffing plan for functional areas across t compensation review with researched salary in basis consistent with the goals of the MSU stra	with external consultants as needed to develop a lon the university, including a classification and nformation to verify or establish new norms for salary ategic plan.
Key Performance Indicators or Outcome Measures	Central functions staffed at average levels in co Reduced turnover Increases service provider job satisfaction	omparison to benchmarks
General Time & Effort Required	MEDIUM. Exact figures to be determined in Des external consultant costs as needed.	sign phase. Time and effort of project team with
Alternative Solutions	Establish an administrative council of central an training, staffing, standardized processes.	nd distributed staff to guide operations such as
ALIGNMENT		
Data Support	Surveys Focus Groups	Professonal Expertise
Initiative Objectives	Operational Efficiency     Employee Satisfact	tion
Departments Served	Image: Academic DeptsImage: AgenciesImage: Image: Image: Image: Academic DeptsImage: AgenciesImage: Image:	Fin & Acct Central     HR Central     Sponsored Programs     University Comm
Constituents Served	✓ Service Users       <100       100-1         ✓ Service Providers       <100       100-1	-500 <b>▼</b> >500 -500 <b></b> >500
Problems Addressed	Paper process       Image: Customer service       Image: Central customer service         Redundancy       Image: Staff expertise       Image: Staff expertise	al/Dist model Lack of integration Comm/Coord capacity Allocation/prioritization Compensation
Processes / Services Addressed	HR Recruiting       Purchasing       IT Si         BPAs       Budget/Finance       EPA	Support
COST-EFFECTIVENE	SS	
A cost-benefit analysis w	as not conducted because the project is less	defined and therefore not easily quantifiable.
Upfront Real Cost	\$ -	Upfront T&E Cost \$ -
Ongoing Annual Cost	\$ - Ongoing	Annual T&E Cost \$ -
Benefits	Cash Savings I Incr. capacity	timated New Net \$ -
COMMENTS AND RE		
Alignment Rating	100% Cost-Effectiveness Rating 100	0% Probability of Success Rating 5%
*Probability of success is	dependent on leadership commitment & being t	fully resourced.

#### **OpenMSU Objectives Addressed**

- Improve service provider satisfaction- address compensation and workload issues.
- Improve service customer satisfaction- improve customer service through adequate staffing of experienced employees.
- **Improve allocation-** improve allocation of services among MSU units by ensuring that central units, which serve all units, are adequately staffed with experienced employees. Improve allocation of workloads among service providers by ensuring that functions are adequately staffed.

#### **Supporting Data**

 In comparison to the HR benchmarking metric used in UC Berkeley's Operational Excellence Diagnostic Report, MSU-Bozeman's Human Resources Office appears to be understaffed. MSU-Bozeman has 183 employees per HR Office employee while the average higher education institution has 127. Based on this metric, the HR Office would need to hire 9 additional employees to be staffed at the level of an average higher education institution. (Note that although the HR Office has 27 employees, payroll FTE is not typically included in this calculation. MSU's HR Office has 6.5 FTE that are dedicated to payroll.)

#### **Detailed Problem Statement**

Administrative operations at MSU-Bozeman (MSU) are provided by a mix of central and distributed (unit-level) service providers. Some central functions, such as the HR Office, University Business Services and the Information Technology Center and administrative functions distributed in academic and other units experience high rates of turnover because of issues such as low pay and heavy workloads. According to CUPA and O\*net benchmarks, MSU staff are significantly underpaid.

Central functions provide services to the entire institution, and business processes that are initiated at the unit level often flow through to these central functions. Inadequate staffing levels and turnover negatively impact the efficiency and effectiveness of the institutions' administrative operations.

Turnover in distributed functions negatively impacts unit-level administrative operations because of time and effort associated with training new employees. Training new distributed service providers is challenging because of the breadth of knowledge needed and the lack of a mature training program for distributed service providers.

#### **Detailed Solution Statement**

Assign a project team of qualified staff working with external consultants as needed to develop a long-range staffing plan for functional areas across the university, including a classification and compensation review with researched salary information to verify or establish new norms for salary basis consistent with the goals of the MSU strategic plan.

#### **Alternative solutions**

- Establish an administrative council composed of central and distributed staff to guide university-wide administrative operations such as:
  - □ Ensuring that service providers are adequately and equitably compensated and that appropriate staffing levels are maintained,
  - □ Ensuring that development and training of service providers is effective,
  - □ Standardizing administrative processes and technologies (including whether processes should be conducted by central or distributed service providers), and
  - □ Responding to emerging regulations that affect administrative practices.

#### **Cost-Benefit Analysis**

A cost-benefit analysis was not conducted because the project is less defined and therefore not easily quantifiable.

# Administrator Evaluations (Open Forum Concept)

		OpenMSU Pro	posa	al					
Upper Administrati	ion Evaluation			STAC	GE	Monitor			
PROPOSAL OVERVI	EW								
Primary Contact	Anne Milkovich			Email	anne.milko	ovich@montana.ed	u		
Title/Department	Recommendations S	ub-Committee Chair		Phone	(406) 994-	5715			
Problem Statement	Faculty are regularly e opportunities and adj evaluated by their sup to adjust their admini	aculty are regularly evaluated by their students. This allows faculty to identify improvement pportunities and adjust their teaching style accordingly. Upper level administrators are only valuated by their supervisors, not those they supervise. Therefore, they do not have the opportunity o adjust their administrative approach.							
Proposed Solution	A project team will reg employees that work year in a new positior	A project team will regularly provide anonymous surveys of upper level administration to the employees that work directly below them. This is especially important during an administrator's first arear in a new position. The evaluators will be encouraged to only provide positive feedback.							
Key Performance Indicators or Outcome Measures	Employee satisfactior	mployee satisfaction with upper level administration							
General Time & Effort Required	SMALL. No depender Exact figures to be de management.	SMALL. No dependencies. Exact figures to be determined upon Concept clearance. Low communication and adoption nanagement.							
Alternative Solutions	• Allow employees to provide feedback to upper level administration at annual open discussions conducted by each individual unit.								
ALIGNMENT									
Data Support	Surveys	Focus Groups		🗹 Professio	onal Expertis	e			
Initiative Objectives	Operational Efficien	cy 🗹 Employee Satisf	action						
Departments Served	<ul> <li>Academic Depts</li> <li>IT Central</li> </ul>	<ul><li>Agencies</li><li>Purchasing Cent</li></ul>	ral 💽	<ul> <li>Fin &amp; Acct Cen</li> <li>Sponsored Prog</li> </ul>	tral 🗹 grams 🗹	] HR Central ] University Comm			
Constituents Served	<ul><li>Service Users</li><li>Service Providers</li></ul>	□ <100 □ 10 □ <100 □ 10	00-500 00-500	□ >500 ✓ >500					
Problems Addressed	Paper process     Redundancy	Customer service 🗌 Cer Staff expertise 🛛 Sta	ntral/Di ff capa	st model 🔲 Lao city 🗌 Allo	ck of integrat ocation/priori	tion 🗹 Comm/Co	oord sation		
Processes / Services Addressed	HR Recruiting	Purchasing   I     Budget/Finance   E	T Supp PAFs/F	ort 🗌 Sponse Payroll 🗌 П	ored Progran Governance	ns 🗌 Web Dev & Co e 🗹 Employee Rela	ontent ations		
COST-EFFECTIVENE	SS								
Upfront Real Cost	* \$	-	Upf	ront T&E Cost	•				
Ongoing Annual Cost		- Ongoi	ng An	nual T&E Cost	\$	-			
Benefits			Estim	ated New Net		*			
Alignment Pating		S	0%	D	robability o	of Success Pating	0%		
Needs further developmen	t before clearing into l	Discovery, clarification	ofsco	pe and intent.		Success Rating	0 76		
		2.000 io., oranioalori	5.000						

### Financial Reporting Improvement (Open Forum Concept)

OpenMSU Proposal								
<b>Financial Reporting</b>	g Process Improvement		STA	GE	Monitor			
PROPOSAL OVERVIE	EW .							
Primary Contact	Anne Milkovich		Email	anne.milkovi	ich@montana.edu			
Title/Department	Recommendations Sub-Committe	ee Chair	Phone	one (406) 994-5715				
Problem Statement	The current report web, SAIS, is outdated. SAIS is also not user-friendly, which makes it difficult for employees to perform their daily work.							
Proposed Solution	A project team will select and implement a web-based ad-hoc reporting tool to replace SAIS. The team will work directly with those who use SAIS to determine the best replacement tool and to accommodate individual unit needs.							
Key Performance Indicators or Outcome Measures	Employee satisfaction with ease of use							
General Time & Effort Required	MEDIUM. No dependencies. Exact figures to be determined upon Concept clearance. Moderate training, communication and adoption management.							
Alternative Solutions	• Hire an external consultant to evaluate the current report web and develop potential improvements.							
ALIGNMENT								
Data Support	Surveys Focu	is Groups	Profession	onal Expertise				
Initiative Objectives	Operational Efficiency  Empl	oyee Satisfaction						
Departments Served	Academic Depts   Agen     IT Central   Purch	icies	<ul> <li>Fin &amp; Acct Cen</li> <li>Sponsored Pro</li> </ul>	ıtral ☑ H gramsl	IR Central Jniversity Comm			
Constituents Served	□ Service Users       □ <100         ☑ Service Providers       □ <100	) [] 100-500 ) [] 100-500	>500 > <b>v</b> >500					
Problems Addressed	<ul> <li>□ Paper process</li> <li>□ Customer server</li> <li>☑ Redundancy</li> <li>□ Staff expertise</li> </ul>	vice 🗌 Central/Di e 🔲 Staff capa	ist model 🔲 Lao acity 🗌 Alk	ck of integratio ocation/prioritiz	n Comm/Coord			
Processes / Services Addressed	HR RecruitingPurchasingBPAsBudget/Final	IT Supp ance I EPAFs/I	ort 🗹 Spons Payroll 🗌 I	ored Programs F Governance	Web Dev & Content			
COST-EFFECTIVENESS								
DISCLAIMER: Conceptual	cost-benefit analysis with an esti	mation range b	etween -30% t	o +50%				
Upfront Real Cost	* \$ -	Upf	ront T&E Cost					
Ongoing Annual Cost	* \$ -	Ongoing An	nual T&E Cost	\$	-			
Benefits	🗌 Cash Savings 🔲 Incr. Capacity	Estim	ated New Net		*			
COMMENTS AND RECOMMENDATIONS								
Alignment Rating         0%         Cost-Effectiveness Rating         0%         Probability of Success Rating         0%								
Needs further developmer	t before clearing into Discover, cla	rification of sco	pe and intent.					

# Front-End Accounting System (Open Forum Concept)

	OpenMSU Proposa	al				
Permanent Front E	and Accounting System	STAGE Discovery				
PROPOSAL OVERVIE	EW					
Primary Contact	Anne Milkovich	Email anne.milkovich@montana.edu				
Title/Department	Recommendations Subcommittee	Phone (406) 994-5715				
Problem Statement	CatBooks is currently the front end accounting system that almost all departments use to create BPAs and reconcile their Banner accounts, not to mention provide reports to department heads, deans, directors, and PIs. However, there are several departments who use alternative systems. MSU needs a standard system that does all this and more.					
Proposed Solution	A project team will determine and implement a permanent front end accounting system that meets the current needs of individual departments.					
Key Performance Indicators or Outcome Measures	Employee satisfaction with ease of use					
General Time & Effort Required	MEDIUM. No dependencies. Exact figures to be determined upon Concept clearance. Moderate training, communication and adoption management. Limited maintenance.					
Alternative Solutions	• Hire an external consultant to analyze the current accounting needs of departments and suggest a system to implement.					
ALIGNMENT						
Data Support	Surveys Focus Groups	Professional Expertise				
Initiative Objectives	Operational Efficiency     Employee Satisfaction					
Departments Served	✓ Academic Depts       ☐ Agencies       □         ☐ IT Central       ☐ Purchasing Central       □	Fin & Acct Central     HR Central       Sponsored Programs     University Comm				
Constituents Served	□ Service Users         □         100-500           ☑ Service Providers         □         100-500	) □ >500 ) ▼ >500				
Problems Addressed	Paper process       Customer service       Central/Dist model       Lack of integration       Image: Comm/Coord         Redundancy       Staff expertise       Staff capacity       Allocation/prioritization       Compensation					
Processes / Services Addressed	□ HR Recruiting       ✓ Purchasing       □ IT Supp         ✓ BPAs       ✓ Budget/Finance       □ EPAFs/I	vort         Sponsored Programs         Web Dev & Content           Payroll         IT Governance         Employee Relations				
COST-EFFECTIVENESS						
DISCLAIMER: Conceptual	cost-benefit analysis with an order of magnitude	e estimate range between -50%to +100%				
Upfront Real Cost	Upf	front T&E Cost				
Ongoing Annual Cost	\$ - Ongoing An	nual T&E Cost				
Benefits	Cash Savings Incr. capacity Estim	ated New Net				
COMMENTS AND RECOMMENDATIONS						
Alignment Rating	65% Cost-Effectiveness Rating 0%	Probability of Success Rating 0%				
* There is no cost-effectiveness or probability of success rating at this current time (11/02/12). Therefore, the recommendation is to move this proposal into the Discovery phase						

# Appendix I: Open Forum Feedback on Proposed Solutions

### **Proposed Solution Votes Tally**

Proposed Solutions and		
Alternatives	Detail	# Votes
BPA	BPA Process Improvement	48
	Customer Service Improvement	
Customer Service	Disney Institute	53
	Customer Service Different	
Customer Service Alternative 1	Customer Training Program	11
	Customer Service No Customer	
Customer Service Alternative 2	Training Program	4
	Eliminate Paper-based Processes	
Elim Paper	(Electronic Doc Mgt Workflow)	119
HR Process Improvement - EPAF	Electronic Personnel Action Form	73
HRPI-EPAF Alternative 2	HRPI-EPAF With Shared Services	10
HR Process Improvement -	Payroll Process Improvement	
Payroll	with External Consultant	32
	HRPI-Payroll No External	
HRPI-Payroll Alternative 1	Consultant	46
HR Process Improvement -	Recruitment and Hiring Process	
Recruitment Hire	Improvement	27
	HRPI-RecHire No External	
HRPI-RecHire Alternative 1	Consultant	53
Purchasing	Purchasing Process Improvement	39
	Purchasing Process Improvement	
Purchasing Alternative 1	With Shared Services	1
	Shared Services Model with	
Shared Services Model	reporting line to A&F	31
	Shared Services Model without	
Shared Services Alternative 1	reporting line to A&F	10
	Central department responsible	
Service Provider Development	for service provider development	51
	SP Development with	
SP Development Alternative 1	Administrative Council	2
Service Provider Staffing and	Evaluate and solve staffing,	
Turnover	salary, and turnover issues	80
	Solve staffing, salary, turnover	
SP-Staffing Turnover Alternative 1	with Administrative Council	5

### **Proposed Solution Votes Graph**



# Appendix J: Open Forum Comments

Below are comments on solutions and alternatives posted at the Open Forum. In some cases, participants added stickers to the comment to indicate their vote for that comment. The number of votes cast for each comment is included in parentheses.

#### **BPA Process Improvement**

• Making this process automated so it reduces the amount of data entry and thus errors will be great.

• Integrate CatBooks with Banner. (5 stickers)

- Permanent front end accounting system that does what CatBooks does and more.
- Sounds great, but short on details. Could CatBooks be utilized to help with this?

**Creating a Culture of Customer Service** 

• I like this idea. I would like to learn more about it.

• Would everyone campus wide get to participate in this? I don't think this would solve the underlying problems.

• Give salary support to administrative staff.

• Do we pay people enough to expect good customer service? Are there negative consequences for bad customer service? (1 sticker)

- This needs to be encouraged for faculty, as well as staff.
- We need to address employees who've worked here forever with a bad attitude.
- Take a hard line on good customer service and replace employees.

• Expect customer service from faculty and all staff.

**Eliminate Paper-Based Processes and Manual Processes** 

• Eliminate the multiple copies needed for travel, P-card and BPA processes. It's ridiculous. (1 sticker)

• All about less paper! Electronic.

• I am all for automation, but we'd need a system for checks and balances, like having authorizers similar to our EPAF system.

• Sounds good, but EPAF is an example of this and the EPAF is very difficult. Need to invest in a system that is user friendly.

• Love less paper. Hate having to do electronic work over again if one little error occurs.

• Reduce rework (e.g., Doing task over if error is found)! (1 sticker)

**HR Process Improvement: EPAF** 

• Emails when an EPAF is returned! It should be an automatic thing! (1 sticker)

• Tired of "babysitting" EPAFs between the time I submit them and when they get approved-send me a confirmation.

• Highlight boxes that need entry.

• EPAFs have helped ease paperwork and some time, but as it is still in its initial form. It would be good to see how it can be improved.

• EPAF is very had for "occasional" users. Not user friendly or intuitive. Professional EPAFs must be linked to LOAs in some manner.

• Like EPAF, but the turnover with HR takes way too long, especially if an error occurs.

• The EPAF system should automatically determine an approval queue based on the type of EPAF, the funding distribution and the department submitting the EPAF. Leaving it up to departments to determine creates multiple errors and do-overs.

• When there is an error on an EPAF, it has to go through the entire list of approvers again. It shouldn't need to be that way! (1 sticker)

HR Process Improvement: Payroll

• Pay us twice a month, speed up the process of getting a raise request approved.

• This has been tried multiple times. Why hasn't it worked in the past? Need to figure that out before investing in another consultant.

• HR has had multiple consultants review operations with no changes implemented. Why not use the suggestions of the users who are unsatisfied with the service to help redesign the program to be customer-service oriented?

• Ask the new CHRO if any planned changes to come rather than hire another expert.

• Again, the external consultants- think we can re-read the 3-4 reports we already have.

• Not sure if an additional consultant is needed, but perhaps a tracking system to help streamline work.

• HR has been through at least 3 external reviews without any follow up!!! This wouldn't work without proper follow-up and support. (2 stickers)

HR Process Improvement: Recruiting/Hiring

• Faculty Hiring processes seem excessively resource intensive.

• Again, we have had more than 1 external consultant read the reports!!

• In recent years, 3 consultants have been employed for this same service. It doesn't seem to be the solution to the problem!

• Again, is there a system that could be put in place to help this process vs. a consultant?

• Ask new CHRO for planned ideas before hiring a consultant.

• I made the same comment on the HR-Payroll process improvement. Why haven't past consultants been beneficial? More money on consultants doesn't seem prudent.

• Same as other comment on HR-Payroll board. This has been tried without any results because there was no support or follow-up. (1 sticker)

Purchasing Process Improvement

• Purchasing can be such an involved process that I think training sessions would be valuable (just to clarify the process to help things move along more efficiently). Educate!

• Technology helps here, but needs an accompanying culture change at MSU. (1 sticker)

Shared Services Model

• Examples?

• Idea has potential, but implementation will be threatening to existing staff.

• Good idea, but hard to implement.

• I think different units have their individual processes necessary to function that this may not work effectively.

• Shared HR, Payroll and Travel services would be helpful.

• Provide the right tools to assist and automate. Change management!

• Very helpful to small departments.

• Ensure all impacted personnel participate in formulation. Attrition should not be the driving factor of sharing services, but rather logic about what makes the most sense and has the most benefit. (2 stickers)

#### **Service Provider - Development**

• I think training is one of our biggest needs for staff on campus. But it must be efficient, effective and made a priority.

• I don't see busy staff having time for this. Training sessions HR does this now and we can't find time to go.

#### Service Provider - Staffing Turnover

• Ask the overworked staff for solutions. With the 183:1 ratio, they know issues and how to get work done.

• We have had numerous external consultants all saying the same thing. Again???

• I think having a trainer on campus can help alleviate this issue a bit.

• Turnover isn't just about pay and workload. It's also about ineffective supervisors and administrators. Someone might be willing to be paid less if they work for a good supervisor who appreciates their efforts.

# Appendix K: Feedback Submitted through Website

The Recommendation Phase web pages contained a mechanism for submitting feedback on individual proposed solutions as well as general comments. Below are comments submitted on proposed solutions.

#### **BPA Process Improvement**

• I think CatBooks needs to be considered as part of this improvement process. Many departments across campus currently use CatBooks to create and track BPAs. I think we should take a hard look at what the CatBooks program does, and make a strategic decision about whether or not to embrace and support CatBooks (or something similar) as part of our normal processes.

• I'm concerned with the cost for departments to be set up to have adequate electronic document handling capabilities.

• I'm concerned with that we already have bottlenecks with Electronic Personnel Action Forms getting all the needed approvals and applied in a timely manner (sometimes longer than a month). What improvement will there be if it sits in someone's queue for two weeks or more instead of in a pile on their desk?

• There needs to be more cooperation OSP and UBS. Sometimes our staff doesn't know who to send BPA's to first because they won't agree. Will we still have the same power issues if the BPA's are done electronically?

#### **Creating a Culture of Customer Service**

• All too often customers think they are receiving poor customer service because we will not help them evade mandates made by Federal and State agencies. Perhaps a culture of teamwork towards doing what is right and ethical should also be promoted. Too often, a person is actually rewarded for unethical and unproductive behavior at MSU.

• The fact that central offices are preventing MSU from being sued, fined and receiving negative public relations should be recognized as good customer service.

• If HR would answer phones, it would be a big service improvement. For some reason they are allowed to ignore phone calls during "peak" periods and expect email rather than phone information to be provided.

• IT will not be able to improve service until they are fully staffed. They will not be fully staffed until their salaries are competitive outside of the "region."

#### **HR Process Improvement: EPAF**

• I agree that something needs to be done to improve EPAFs. Required paper documents, such as LOAs, need to be attached or linked to the EPAF so they can be reviewed and approved together.

• The reduction of cycle times at the payroll level does not address the problem at the Originator and Approver levels (see bullet above).

• Having HR check for "technical" errors at the start of the process instead of after the approval process would be a significant improvement.

• Changes to the form itself should also be considered.

#### HR Process Improvement: Payroll

• Outside consultants have come and gone at MSU with no implementation as a result. Implementation is key. It is imperative that the people who are working in the 'trenches' have some say in how the processes work, or not. We have experience in the details and could have some very good input.

• A large part of the payroll processing resources is spent on dealing with the numerous exceptions made by upper administration. It is not an HR or Payroll problem it is a systemic institutional problem, but institutional leaders don't seem to have the will to take any effective, positive action. University leadership is divided in vision and spend an inordinate amount of time dealing with unnecessary approvals and unproductive criticism.

• HR Payroll would be greatly improved if they did not request modifications to Banner which hinder their processing. They have been unwilling under PAST leadership to change processes.

#### HR Process Improvement: Recruiting/Hiring

• I would like to ask whether MSU would need to hire a consultant to analyze processes and propose recommendations to improve this process on the MSU campuses. Since MSU Bozeman just recently hired a new Chief Human Resource Officer who has spent his career in this field, it would seem logical to me for MSU to use his expertise rather than spending money on an external consultant.

• HR recently approved the purchase of an applicant tracking system. Perhaps it would be better to hire consultants who can help with the implementation of the product that is selected via the rfp process?

• It seems that in the past there have been many outside consultants come in and forums conducted, with no results implemented. It is a good idea, but implementation is key.

#### Shared Services Model

• I totally disagree that this would work better.





# Appendix M: OpenMSU Roadmap Poster

