Eliminate Paper-based and Manual Processes	STAGE	Prioritization

PROPOSAL OVERVIEW

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, negatively impact customer service, and impact space 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, design, and implement Electronic Doc Mgt Workfow solution and manage organizational change. Document Management stores an external document as an image rather than in a physical file. Worflow automates approval queues and administrative processes.		
Key Performance Indicators or Outcome Measures	Number of departments adopting imaging over paper Reduced process cycle times Employee satisfaction with ease of use Reduction of physical paper storage		
General Time & Effort Required	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	• Implement multiple integrated electronic document management and workflow solutions to support different business needs. • Hire an outside consultant to implement EDMW and manage the organizational change process.		

ALIGNMENT

Data Support	☑ Surveys ☑ Focus Groups ☑ Professional Expertise
Initiative Objectives	☑ Operational Efficiency ☑ Employee Satisfaction
Departments Served	☑ Academic Depts ☑ Agencies ☑ Fin & Acct Central ☑ HR Central ☑ IT Central ☑ Purchasing Central ☑ Sponsored Programs ☑ University Comm
Constituents Served	☑ Service Users ☐ <100 ☐ 100-500 ☑ >500 ☑ Service Providers ☐ <100 ☐ 100-500 ☑ >500
Problems Addressed	☑ Paper process ☑ Customer service ☑ Central/Dist model ☑ Lack of integration ☑ Comm/Coord ☑ Redundancy ☐ Staff expertise ☑ Staff capacity ☐ Allocation/prioritization ☐ Compensation
Processes / Services Addressed	☑ HR Recruiting ☑ Purchasing ☐ IT Support ☑ Sponsored Programs ☐ Web Dev & Content ☑ BPAs ☑ Budget/Finance ☑ EPAFs/Payroll ☐ IT Governance ☐ Employee Relations

COST-EFFECTIVENESS

DISCLAIMER: Conceptual cost-benefit analysis with an estimation range between -30% to +50%.

Upfront Real Cost	$	309,000	**Upfront T&E Cost**	$	15,300
Ongoing Annual Cost	$	-	**Ongoing Annual T&E Cost**	$	239,000
Benefits	☑ Cash Savings ☑ Incr. capacity		**Estimated New Net (5 year)**	$	(705,000) *

COMMENTS AND RECOMMENDATIONS

Alignment Rating	0%	**Cost-Effectiveness Rating**	0%	**Probability of Success Rating**	0%

* 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.

Eliminate Paper-based and Manual Processes				
REF	**CATEGORY**	**FACTOR**	**METRIC**	**VALUE**
ALIGNMENT				
A.1	Institutional:	Mission	Outcome aligns directly to support of MSU discovery, creativity, service mission.	0
A.2	Initiative:	Increased efficiency	Outcome results in optimized process, productivity, and throughput.	0
A.3	Initiative:	Improved satisfaction	Outcome results in improved employee job satisfaction.	0
A.4	Scope:	Horizontal problems	Outcome addresses all the identified horizontal problems of the organization	0
A.5	Scope:	Processes/services	Outcome addresses all the identified process or service problems	0
A.6	Scope:	Functional areas	Outcome addresses all of the functional area departments in the initiative scope	0
A.7	Constituents:	Constituent reach	Outcome directly addresses deepest identified constituent needs.	0
A.8	Constituents:	Constituent span	Outcome directly addresses needs of the widest number of constituents.	0
COST-EFFECTIVENESS				
C.1	Cost:	Ongoing	Ongoing cost is minimal or none.	0
C.2	Cost:	Upfront	Upfront cost is minimal or none.	0
C.3	Fiscal:	Cost Savings	Outcome reduces cash outflow.	0
C.4	Functional:	Time Savings	Outcome reduces time on process.	0
C.5	Opportunity:	Resource Availability	Necessary FTE and other resources are available and underutilized.	0
C.6	Opportunity:	Alternatives Availability	Time & effort cannot be better spent on any possible alternative.	0
PROBABILITY OF SUCCESS				
P.1	Institutional:	Critical Success Factors	CSFs are achievable with a high probability of occurring easily.	0
P.2	Institutional:	Funding Availability	Upfront and ongoing funding is sufficient for the life of the project.	0
P.3	Institutional:	Cultural willingness	The institutional culture is ready and willing to adopt this solution over alternatives.	0
P.4	Planning:	Training	Training needed is minimal and has been adequately planned for.	0
P.5	Planning:	Measurement	Outcome performance is measurable and will be reported.	0
P.6	Planning:	Stakeholders	Stakeholders are identified; expectations are reasonable and manageable.	0
P.7	Scope:	Complexity	Complexity is minimal; scope is defined and manageable.	0
P.8	Sustainability:	Ongoing Support	Ongoing support needed is minimal or readily available at low cost.	0

OpenMSU Objectives Addressed

- **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 paper-based 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.