

Adventures in implementing Labor Redistributions

Presented by: Roopa Chowbey, Roderick Wolfe
George Washington University
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Session ID 0285

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- If you must leave the session early, please do so as discreetly as possible
- Please avoid side conversation during the session
- Please keep your questions to the end of the session

Thank you for your cooperation!

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Introduction

- This session gives an overview of our experience with implementing the Labor Redistribution application at GWU
 - GW did not implement the Effort Certification portion of this application. Effort certification is currently done outside of Banner
- Attendees of this session will be introduced to the tasks, challenges and set-ups involved in implementing Labor Redistribution at their university

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Agenda Slide

- **Background**
 - GW Overview
 - Current process for Labor Redistribution requests
 - Proposed process using Labor Redistributions in Banner
 - Application independent User requirements
- **Set-up of application**
 - Building the Approval Routing Workflow
 - Challenges due to different requirements and organization structures
- **Mapping the routing requirements to functionality available in set-up forms**
- **Enhancements made to address requirements**
 - Gap analysis of requirements vs. existing functionality
- **Implementation**



Background

GW Overview

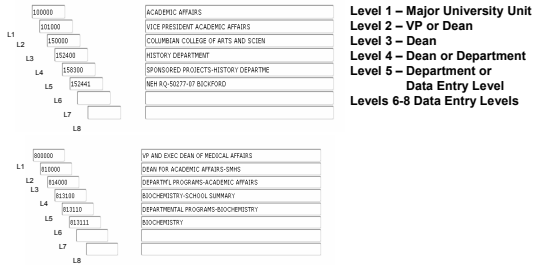
About 4300 data entry organizations across:

- | University side | Medical Center |
|--|--|
| • About 2800 organization codes | • About 1500 organization codes |
| • About 10,600 employees | • About 4650 employees |
| • Has sponsored and non-sponsored Research | • Has sponsored and non-sponsored Research |
| • About 640 grant codes | • About 565 Grant codes |

- Approximately 80 initiators across the two organizations
- An average of 4000 redistribution requests processed per year for both

GWU's Basic Organization Hierarchy

8 Levels to designate groupings of organizations



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Current process for Labor Redistribution requests

- Paper based process
- Paper request prepared and sent to approvers who write their comments on the paper
- All entries and calculations done by Payroll
- Issues with current process include:
 - Lack of efficiency
 - Errors related to incorrect data entry
 - Length of time taken from start to finish
 - Lack of accountability
 - Initiator may not know who the right approvers are, so a significant approver may get missed
 - All data has to be queried for, from disparate systems, and entered on the paper form by Initiator

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Proposed process using Labor Redistributions in Banner

- Use the Labor Redistribution module in Banner 8, implemented as part of Self Service
- Automatically populate the current distributions for an employee and display the FOAPAL elements for proposed redistribution for Initiator
- Automatically derive the approvers for a redistribution request based on set-up criteria
- Payroll does not have responsibility of entering the changes
- Speedy approval process expected

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Application independent User requirements

Working committee set-up with members from across departments came up with following high-level requirements (not a comprehensive list):

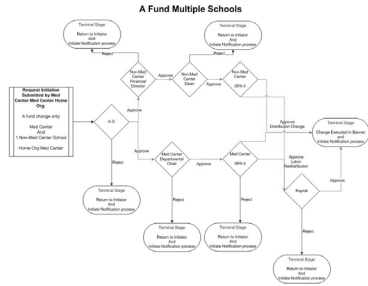
1. All information displayed should be from GW ERP systems. All elements from current paper form should be available
2. Information displayed by the system shall be the most recent fully approved data
3. Approvals could be at various levels, with role-based approvals. System should permit approvals using approval groups
4. The system should support an approver and initiator proxy/delegate function
5. At any point in the process individuals may be notified of the progress of any request
6. The system must support a systems administrator forced approval or rejection function (Super User function)
7. The system should support the users need to track requests individually by initiator
8. System should support attachment of supporting documentation
9. On-Demand Request-in-Process reporting

Set-up of Application

Building the Approval Routing Queues

- Tasks involved getting requirements for approval routing from both the University side and Med center
- Initial requirements were complex and had many approval hops. Also, the routing was different for sponsored and non-sponsored research
- Sample of approval routings asked for:

Requirement 1

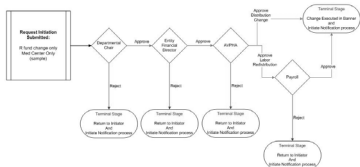


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Requirement 2

R Fund Only

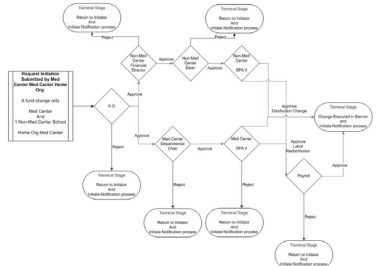


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Requirement 3

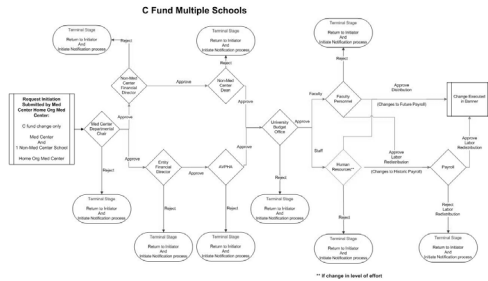
A Fund Multiple Schools



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Requirement 4



Challenges experienced in this phase

- Different approval routing asked for by different departments
- Information NOT maintained in Banner
 - FTVORGN table Financial manager
 - FTVFUND table Financial manager
 - FRAGRNT tables for grant information such as title, dates, personnel, and user defined data
- Documentation for set-up for Labor Redistribution was insufficient for GW to set-up the required approval routing
- Installing the application took time due to environmental as well as documentation issues

Challenges addressed

- Worked with University and Medical Center focus group to streamline and standardize the approval process
 - Complex routing requirements were whittled down into a simpler approval path, with no concurrent routings
 - User groups revisited their own processes and came up with a list of absolutely necessary approvers
 - Others on the list could be informed about the request
 - However, there was still a mismatch between the routing requirements of the University and Med center
- Key information updated in Banner
 - Financial Managers updated in FTVORGN and FTVFUND tables
 - Grant information updated in FRAGRNT tables for titles, dates, and personnel
- Documentation insufficiencies were overcome by having an ex-SunGard employee as our consultant
- Application was installed initially with no SSL and later with SSL in a load-balanced environment, after working continuously with SunGard development team

Mapping the routing requirements to functionality available in set-up forms

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University Approvals

Initiator → Dean → HRIS/Payroll

Dean approvers - obtained from the appropriate organization hierarchy

College	Org Level	User Id
Columbian College	Org Level 3 150000	xxxDAC
Elliot	Org Level 4 180100	xxxRDS
Education	Org Level 4 160100	xxxGPN

HRIS/PAYROLL - a group of approvers with equal approving authority

User Id - xxxMJA

User Id - xxxBNL

User Id - xxxGKB

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Medical Center Approvals

Initiator → Dept Chair → If research → SPA2 → → → → → Payroll

Initiator → Dept Chair → no research → → → EFD → AVPHA → Payroll

Dept Chair - obtained from the Financial Manager identified on the Organization code in the labor redistribution transaction.

SPA2 (Sponsored Research Administrators) - obtained from personnel defined on the grant.

EFD (Entity fund directors) - obtained from the Financial Manager identified on the Fund code in the labor redistribution transaction.

AVPHA approvers are obtained from the Organization Level 1

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Set-up forms – NTVQPRT & NTRQPRT & NTRELRLQ

Name	Data Source	Group Members	Seq	Action
PAYROL	Group	User Id – xxxMJA User Id – xxxBNL User Id – xxxGKB	99.0	Approve
DEPTCHR	Organization		10.0	Approve
SPA2	Grant Ind = 002		20.0	Approve
EFD	Fund		30.0	Approve

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Set up form - NTRELAQ

	Org Code	User Id	Seq	Action	FTYP
L 3	150000	xxxDAC	50.0	Approve	All
L 4	180100	xxxRDS	50.0	Approve	All
L 4	160100	xxxGPN	50.0	Approve	All
L 1	800000	xxxMGB	80.0	Approve	11

Note: FTYP 11 = Unrestricted

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Deriving the routing queue based on set-up

For the University

- In order to select the Dean of the college(s) involved in the redistribution request, we have updated the NTRELAQ form using the appropriate tier organization codes (which are the college level codes) for all organization codes that are on the University side
- As a result, the routing queue builder begins with the organization code on the transaction and works its way up the organization hierarchy until it finds the User Id which we have only at the appropriate tier level – the Dean

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Enhancements made to address requirements

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Gap analysis of requirements vs. existing functionality

The following user requirements were not entirely met by the application

1. All elements from current paper form should be available
 - Users needed additional Grant related details to be displayed in the current and new distribution panels
2. At any point in the process individuals may be notified of the progress of any request
 - Users wanted an email notification for approval requests in their inbox, if a request was sent back for rework or if a request was successfully completed
3. The system should support the users need to track requests individually by initiator
 - Users wanted a tab to display all open requests for an initiator when they logged into the application
4. System should support attachment of supporting documentation
 - Users wanted a mechanism to securely attach and retrieve supporting documentation per request
5. On-Demand Request-in-Process reporting
 - Detailed Management reports for open and closed requests, average time for processing etc.

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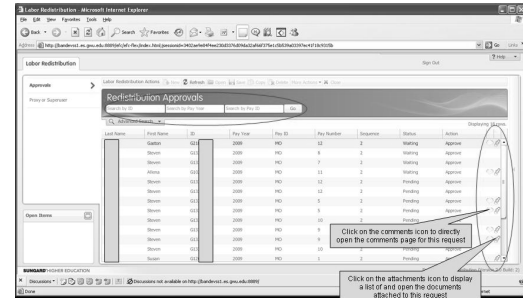
Addressing Gaps - 1

- All elements from current paper form should be available
- Enhanced UI for additional columns display of Grant related information (PTA - project, task, award details)
 - Built an interface to bring in Grant and personnel information into Banner from Oracle Financials.
 - Enhanced UI to display a Comments icon in the Approvals Summary if there are comments made against a request.
 - Click the Comments icon to open the Comments window
 - Enhanced UI to display a "paper clip" attachments icon in the Approvals Summary if there are attachments for a request.
 - Click the "paper clip" icon to open the Attachments window
 - Enhanced UI to display only "Labor Redistribution" tab since GW was not implementing Effort Reporting

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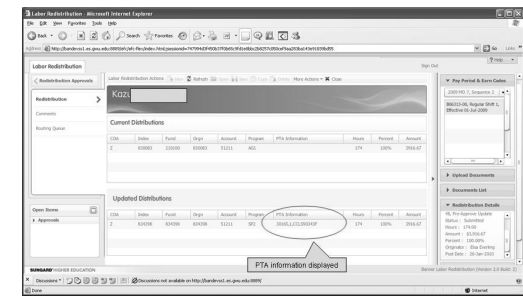
Enhancements made to address Gap 1



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More enhancements made to address Gap 1



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Addressing Gaps - 2

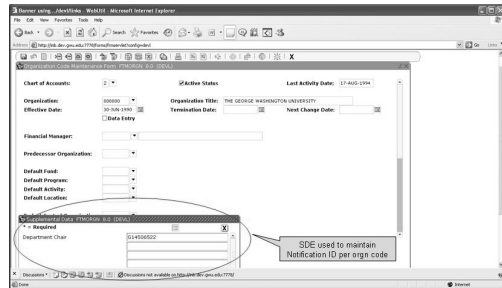
At any point in the process individuals may be notified of the progress of any request

- Built a custom notification system that can be reused by any other module of Banner. Works off of triggers on PHRLRRQ table and logs all sent emails into a custom table
- Challenge faced in deriving the final notification to Department chairs, because of contradictory routing requirements
- Resolved the issue by using Banner Supplemental Data Engine to set up a “notification department chair” column to store their Banner id for all data entry organizations

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Example: SDE set up to store notification ID



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Addressing Gaps - 3

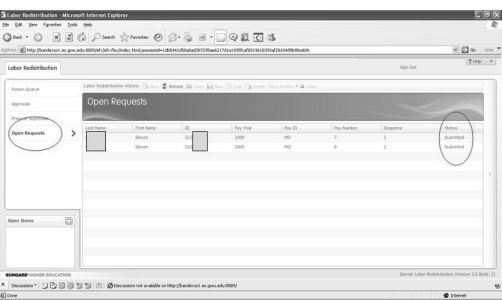
The system should support the users need to track requests individually by initiator

- Enhanced the application to include a new navigation link in the Initiator's page for Open Requests
- This navigation link is only available for Initiators
- This navigation link displays all open requests initiated by the person logged in, similar in concept to the display in the Approvals tab
 - Includes the Comments icon to indicate that comments have been entered

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Enhancements made to address Gap 3



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Addressing Gaps - 4

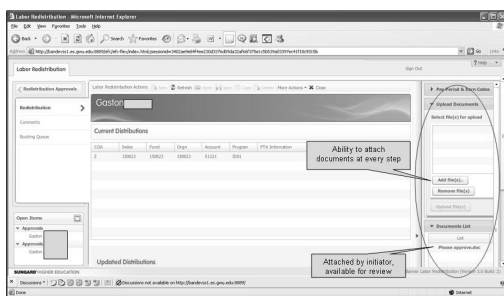
System should support attachment of supporting documentation

- Developed a custom solution to allow upload of different types of documents against a request
- These documents are stored in our Document management system in a pdf format
- Initiators and approvers can attach documents
- Only the initiator and approvers for a request are able to view documents attached to a particular request
- Only the document owner can delete a document
- Documents are indexed on Banner pidm and pay event in the document management system
- Access to the documents are only through the Labor Redistribution application, hence Banner security is maintained

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Enhancement to address Gap 4



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Addressing Gaps - 5

On-Demand Request-in-Process reporting

- Report for all open requests, along with their approval routing and the status of a request
- Details of changes made for each request
- Report can be run for a number of input parameters, making it flexible for users to get the information they are looking for
- Report is run from Banner inb. Currently scheduled to be run nightly and a .csv file is made accessible to users

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Implementation

- Issue experienced while trying to implement a SSL solution for secure access to the application
- Prepared Training documents to cater to an audience which is used to the paper form – the training process had to also include elements of change management
- User Acceptance testing sessions started off with training on the application
- Pilot approach or big-bang implementation?

Summary

- The entire implementation took about 10 months to complete, from the initial discussion to final use.
- The 10 month project could roughly be divided into 4 phases, running concurrently at times
 - initial requirements and routing discussion (16 weeks),
 - installing the application and enhancing it (20 weeks),
 - data cleanup and updates in Banner (8 weeks),
 - training and UAT (6 weeks).
- We were working with a team
 - 1 SME (Subject Matter Expert) consultant,
 - 2 Business analysts,
 - 4 developers (with some additional help as needed),
 - 1 DBA,
 - 1 GW consultant,
 - 1 Trainer.
- In addition, we had 2 Project Managers
 - one to manage the University and Med-center requirements
 - the other to manage and coordinate IT requirements.
- For UI enhancements, a specialized skill set is required,
 - a combination of Adobe Flex and Java development skills,
 - along with some backend Oracle knowledge.
- For setting up the application, a knowledge of the Finance table setups is necessary (the Index, Fund, Organization and Grant tables)
- For installing the application, an experienced Oracle DBA with system administration capabilities is required.

Questions & Answers

If you have technical questions, please attend our technical session:
Demystifying the ERLR Flex Application (1038)
on Wednesday, April 14th at noon

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Thank You!

Roopa Chowbey

rchowbey@gwu.edu

Roderick Wolfe

rwolfe@gwu.edu

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