

**THE UNIVERSITY OF IOWA**

**Internal Audit Department**

**Workflow Business Process Review**

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# INTERNAL AUDIT REPORT

## Workflow Business Process Review

### BACKGROUND

Workflow is the process of approving various types of transactions/forms through an electronic routing system. Based on predetermined Workflow paths, these forms can be approved electronically and sent on to the next person on the approval path. After all of the defined approvals have been attached, the form is automatically directed to the applicable central department (i.e. Human Resources) for processing. The Workflow System was developed internally with the first implementation in December 2002. The System was created in response to many needs campus wide: security of data, limited storage space, form tracking, the need to reduce costs of form processing (time and supplies). Human Resources (HR) was the first area to process online transactions/forms through the Workflow System, followed by Purchasing with Purchase Requisitions, and then Motorpool with Vehicle Rental Requisitions. An ongoing effort is being exerted to customize current paper process applications to be implemented for use with the Workflow System. There are numerous applications at various stages of development and the anticipation of the campus community is enthusiastic.

### PURPOSE AND SCOPE

At the request of Management, Internal Audit conducted a business process review of the Workflow System. We evaluated the adequacy of procedures and internal controls of the System to ensure:

- Sufficient training was provided to designated Workflow Administrators and Users.
- Proper Workflow path setup, management, and monitoring.
- Proper signature delegation, authorization, and approvals.
- Proper record/document retention at the departmental level.
- Effective and reliable system security and data backup.
- Customer/user satisfaction, reliability, and efficiency.

System users from a number of University areas, including the UIHC, were judgmentally selected to be interviewed. A questionnaire was conducted with representatives from 7 different University Organizations (Orgs) and 15 different Departments, for a total of 22 separate reviews.

During the review of the Workflow System, we also indirectly analyzed some of the current transaction system processes on a limited basis.

### DISCUSSION AND CONTROL RECOMMENDATIONS

#### 1. Workflow Paths

*Discussion* After an online transaction form is completed, the Initiator picks a predetermined path to send the form on in Workflow for various individual reviews, edits, and approvals. The System initially produces a default list of Workflow paths for the Initiator to choose from. The default paths were set up by either the Org or Departmental Workflow Administrators of the corresponding Master File Key (MFK) being charged. Any valid MFK can be entered on the form by the Initiator even if the Initiator does not have the authority to

charge expenses to the account. There is also a link that allows the Initiator to select any Workflow path even if not related to the initial charging departments' MFK. By allowing this same flexibility in Workflow as with forms in paper format, the risk of possible abuse is still prevalent. A department affected by a transaction may be bypassed from the approval process.

*Control Recommendations* Build logic into the System to allow all departments affected by a transaction to be included in the Workflow approval process.

*Corrective Action by Management* A cost/benefit analysis will be performed to determine if the benefit of including this functionality in the workflow environment outweighs the programming and administrative cost of keeping the system accurate and up to date. Once this is identified, management will determine how to proceed.

*Individual Responsible* – University Controller. *Target Date* –10/31/04.

*Auditor's Comment* A formal follow-up will be initiated subsequent to the target implementation date, which will include a review of the assumptions and documentation of the cost/benefit analysis.

## 2. **System Administration**

*Discussion* A) From our audit sample, a situation was noted, where a Workflow Approver selected someone to be her Delegate on the Workflow path in her absence. The Delegate selected was not the person the Approver thought she was designating as her Delegate. Although rare, this occurrence points out a potential control problem. The incorrectly selected Delegate cannot be adjusted by just anyone for security purposes. System Administrator rights allow an authorized person to sign into the Employee Selfservice Center/Workflow System as the person who created the error in order to reverse or fix the problem. However, this access level also allows the Administrator to see all of the employee's personal information (benefits, payroll, etc.). Corrections can be made within Workflow without identifying who has made the change. These Administrator rights have been given to 50 employees, including the Director of Purchasing. This access level should be limited to very few, and no one outside of Payroll or Human Resources should have access to an employees' personal data.

B) A Workflow System Developer has full access to the production application. Proper IT controls prohibit developer/programmers from having administrative rights to the production system. This is to prevent them from making changes to the production system that have not been properly tested or authorized. COBIT (Control Objectives for Information Related Technology), Section P04.10, states in part: "In particular, a segregation of duties should be maintained between the following functions: ...system administration; systems development and maintenance;..."

*Control Recommendations* A) Administrator rights should be limited to a select few within the HR Department. If other areas need to have the ability to fix problems created in the respective transaction system (e.g. Purchasing), create a method that does not allow the person with administrator rights to access an employee's personal information. All administrator actions should be documented in an edit report and reviewed and approved

daily by a supervisor. B) Developers should only have user access rights to the production system.

Corrective Action by Management A) The current Workflow System Administrator listing has been reviewed. This access level will be removed from those who are not in the Human Resources and Benefits Offices. A method to track who has made changes while using System Administer access will be explored with a solution identified. The Workflow System Administrators will assume the responsibility for correcting issues related to transactional routing errors in all transactional systems. A special application has been written that will permit Workflow Administrators in areas outside of Human Resources to fix Workflow routing problems in his/her respective area without allowing access to view an employee's personal information. B) Currently there is only one Workflow System Developer that has full access to the production application. In the long term, the goal is to move this person to be strictly system administration. However, in the short term, due to our small technical staff it is not feasible to remove this capability at this time. It is necessary to have multiple persons with full access to the production application to cover situations as they arise.

- A) *Individual Responsible* – Associate Director, Human Resources. *Target Date* – 9/30/04.  
B) *Individual Responsible* – Associate Director, Human Resources. *Target Date* – Completed.

Auditor's Comment A) Management has begun taking steps to address our comments. Concur with action plan. A formal follow-up will be initiated subsequent to the target implementation date. B) Management has determined to accept the risks associated with allowing a Workflow System Developer to have full access to the production application.

### 3. Interdepartmental Purchases

Discussion During the Workflow Review, an issue was brought to our attention regarding interdepartmental requisitions. All current requisition-related forms require two different signatures before the transaction will be processed with the exception of interdepartmental supplies and services. Current policy (Operations Manual, Part V, Chapter 11.18) allows each Unit that offers supplies and services to other University Units to set their own procedures.

Motorpool, which is covered under the above Policy section, provides the University with vehicle rentals/leases. Requests are completed and processed through the Workflow System. Any person who has access to the Employee Self-Service website has the ability to complete a Motorpool/Fleet Requisition. Per policy, Motorpool has set their own procedures; only one signature is required on the requisition for processing.

The risk for departmental/employee abuse is significant, not only for services provided by Motorpool, but for other departments providing interdepartmental supplies and services as well.

Control Recommendations The Motorpool/Fleet Requisitions should be changed to parallel all other requisition policy, to require two different departmental signatures on every requisition. Additionally, as other interdepartmental services' requisition forms are added to the Workflow System, they too should be required to obtain two different departmental

signatures. An exerted effort should be made to encourage areas that provide interdepartmental supplies and services to implement their requisition-related forms into Workflow.

Corrective Action by Management Motorpool/Fleet Requisitions will be changed to require two different departmental signatures. Workflow Org and Departmental Administrators will be notified of the change in policy and instructed to set up the Requisition Workflow paths accordingly. They will also be put on notice that from this point forward all requisition-related forms incorporated into Workflow will now require two different departmental signatures. The Operations Manual, Part V, Chapter 11.18 will be revised to reflect the change for Motorpool Requisitions and noted that as the other interdepartmental service and supply requisition forms are added to Workflow, they will also require dual departmental sign-off. The interdepartmental supply and service areas that currently do not utilize the Workflow System will be approached and encouraged to do so within the next fiscal year.

Individuals Responsible – University Controller, Associate Director, Human Resources and Assistant Vice President, Business Services. Target Date – 9/30/04.

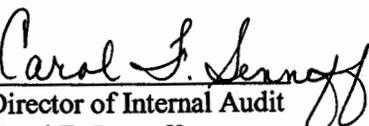
Auditor's Comment Concur with action plan. A formal follow-up will be initiated subsequent to the target implementation date.

#### SUMMARY

The audit focused on specific Workflow System processes evaluating controls, efficiencies, and compliance to current policies and regulations. There was an overwhelming enthusiasm from the users of the current Workflow System. Because of changing conditions, such as the addition of numerous new applications to the System, management needs to continually assess the current and ongoing processes to ensure they are still effective. System users need to be reminded frequently that requirements, including transaction supporting documentation and good business management, are still necessary with the Workflow System and any electronic system. A follow-up audit will be scheduled during the second quarter of fiscal year 2004-05.

  
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