



Auditing for a Better Oregon

April 26, 2004

Dr. Edward J. Ray, President
Oregon State University
646 Kerr Administration Building
Corvallis, Oregon 97331-2128

Dear Dr. Ray:

We have completed our audit of application controls over Oregon State University's Banner Student Information System and issued our report No. 2004-18. Our audit was limited to reviewing controls and determining the data integrity of student academic records, financial aid, and student accounts receivable. The following are issues that we believe warrant your attention, but were not significant enough to be included in our audit report.

Security of Workstations Needs To Be Improved

Access to information technology resources should be appropriately protected to prevent or deter loss or damage from unauthorized users.

The university has not established formal policies to require employees to secure workstations by logging off or using password-protected screensavers when leaving their workstations unattended. Although it is the practice of employees in some departments to lock their workstations by engaging password-protected screensavers, not all departments require employees to do this.

We recommend that management develop and implement policies and procedures to better secure workstations when left unattended.

Improve Audit Trails

Audit trails are an essential component of well-designed information systems. They enable the recreation of the actual transaction flow from the point of origination to its existence on an updated file. An audit trail identifies who initiated a transaction, the time of day and date of entry, the type of entry, what field of information it contained, and what files it updated.

Management Letter No. 580-2004-04-01

The university needs to improve audit trails for the following transactions:

- Web grade entry. During academic year 2002-2003, the university implemented a process for course instructors to enter student grades through the web. The audit trail for these entries is retained for only five terms before being purged from the system. The current retention schedules do not specifically address web grade entry; however, the retention period for grade sheets, web entry's precursor, was ten years.
- Entering fee assessment codes and modifying the on-line fee assessment function. At least four and 13 employees have access to modify these functions, respectively. These functions affect how students are assessed tuition and fees, which provide revenue to the university. Management informed us that not all of these employees use these functions. The employees that have access to the computer screen containing the on-line fee assessment function have the access because the screen contains other functions these employees need to use. Neither fee assessment functions have an audit trail. As a result, related activity cannot readily be traced to a particular individual.
- Financial aid decisions and changes in awards. The computer screens that display and maintain financial aid awards and disbursement information do not have audit trails. As a result, original award information and changes to awards are difficult to recreate and cannot reliably be traced to a particular employee.

We recommend that management evaluate whether it needs to retain the audit trail for web grade entries for a longer period and establish audit trails for the other functions described above.

Operating Procedures Should Be Fully Documented

Written procedures detailing standard operating procedures coupled with appropriate management review are necessary parts of the information services control environment to ensure that important system functions are performed as prescribed. The documentation should include operator procedures based on the assigned responsibilities; procedures for rectifying machine or program failures; and problem escalation procedures to identify who should correct specific types of problems and which problems require urgent resolution. Once prepared, the operations manual should be updated on an ongoing basis as applications, systems and hardware change.

Routine and non-routine processes of the university's production operations have not been fully documented. This condition exists because the university's operations facility is small, turnover is low, and operators are familiar and confident with the processes they are responsible for performing. However, fully documented procedures could reduce the risk that problems during processing or recovery after a disruption of service may not be properly or timely resolved.

We recommend that management fully document operating procedures and periodically review and update them.

Routine Review for Production Schedule Departures Not Performed

Procedures should be in place to identify, investigate, and approve departures from standard production schedules. This is a control that management can use to ensure adherence to approved and documented production schedules.

Management has not developed and implemented procedures to routinely identify and investigate changes to the production schedule. Without this control, management has less assurance that only authorized jobs have been run.

We recommend that management develop and implement procedures to review the production schedule for departures and investigate and resolve accordingly.

We appreciated the courtesies and cooperation extended by your staff during our audit. If you have any questions, please contact Dale Bond or me at (503) 986-2255.

Sincerely,
OREGON AUDITS DIVISION

Nancy L. Young, CPA, CISA
Audit Administrator

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c: Thomas Anderes, Senior Vice Chancellor of Finance and Administration
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