

Snapshots of IT Audits

Oregon Secretary of State – Audits Division

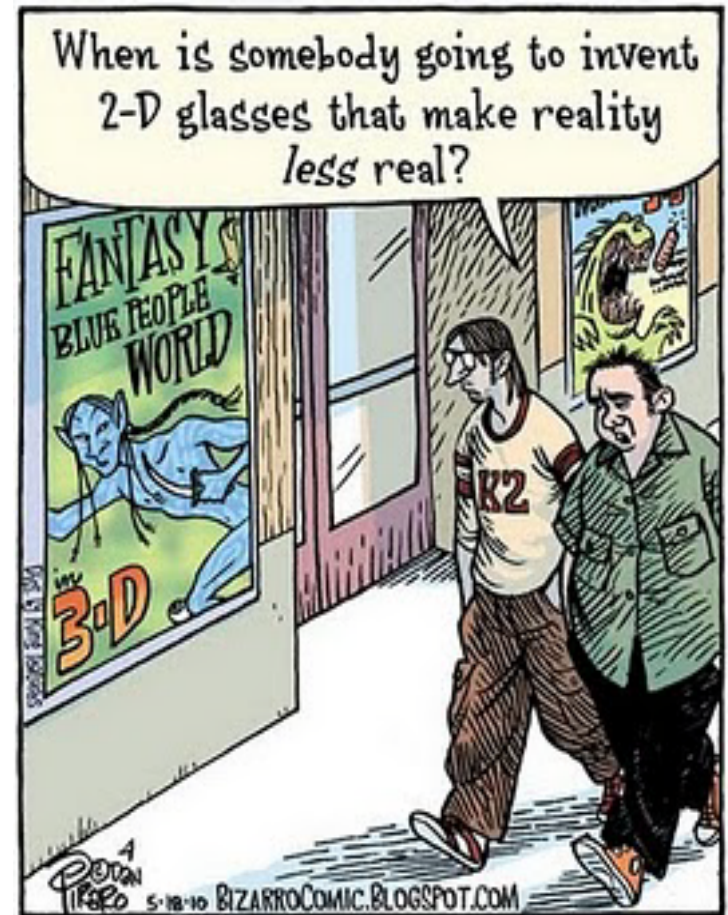
Teresa Furnish, CISA

Erika Ungern, CISA

Neal Weatherspoon, CPA, CISA, CISSP

Snapshots of IT Audits

- General Controls – State Data Center
- Application Controls – Oregon Benefit Information System
- Special Projects & System Development – EROAD Pilot

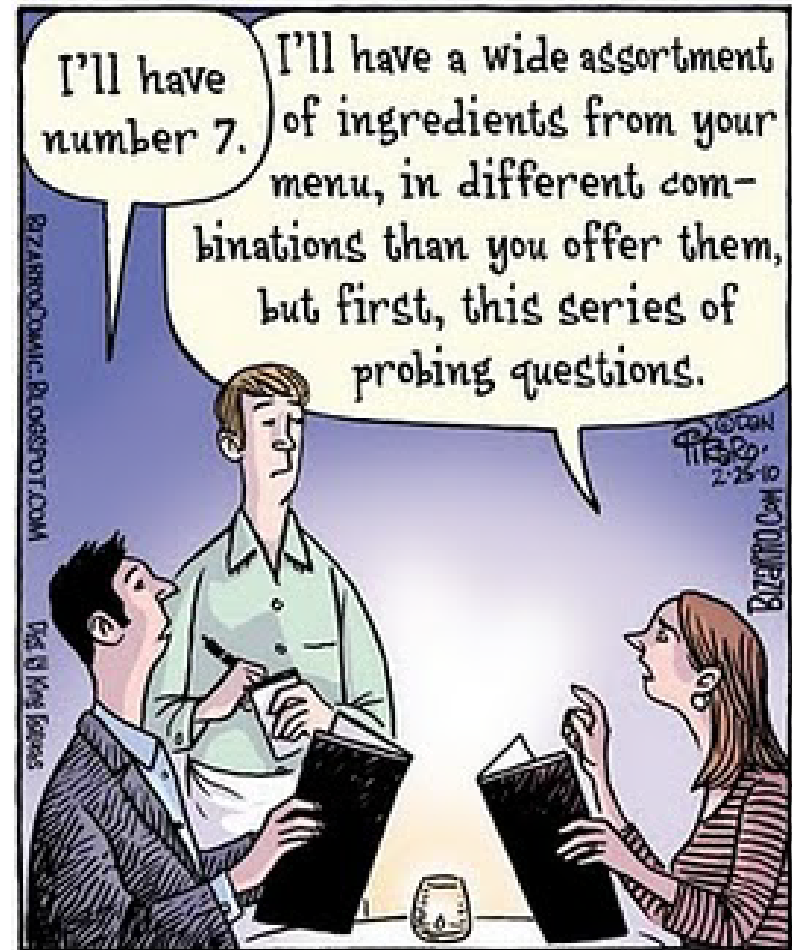


General Controls - State Data Center

Teresa Furnish, CISA
Senior Auditor

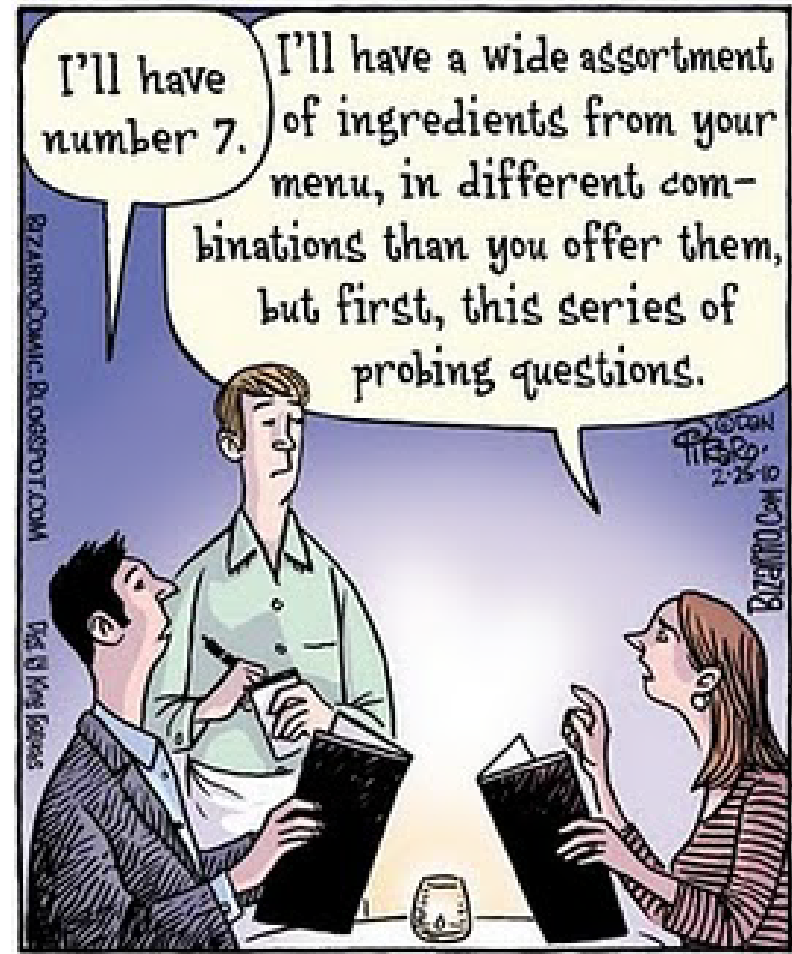
State Data Center

- Operated by the Department of Administrative Services
- Created in 2005 through the consolidation of data centers previously operated by state agencies



State Data Center

- Hosts the computer systems for 11 state agencies
- Provides Internet service and networking for the majority of state agencies
- Complex environment and extensive inventory



General Controls

- The structure, policies, and procedures that apply to an entity's overall computer operations.
 - Service level agreements
 - Capacity planning
 - Production controls
 - Disaster Recovery
 - Asset & configuration management
 - Access controls
 - Security

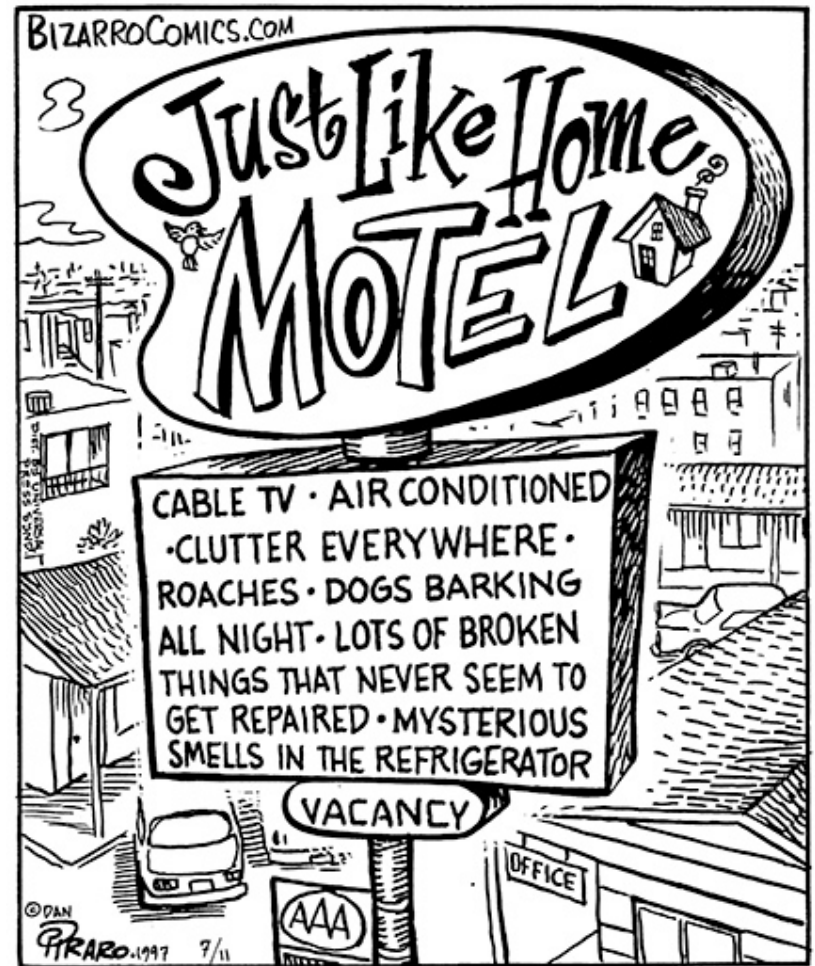
Operations Strengths & Weaknesses

- Environment monitored and controlled
- Routine back-ups performed for agency applications
- Computer processing on behalf of agencies well-monitored and problems investigated and resolved



Operations Strengths & Weaknesses

- Management has not defined customer service level expectations
- Configuration management did not facilitate disaster recovery and security
- Disaster recovery strategies not fully documented or tested



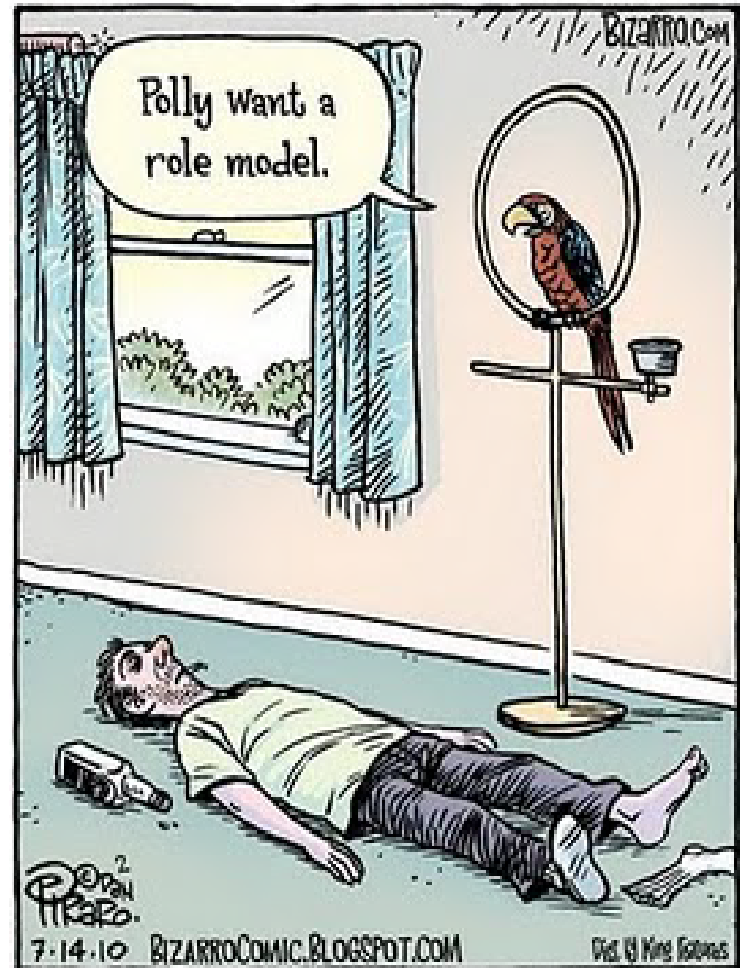
Security Weaknesses

- Long-standing problems
- Most proprietary to the State Data Center
- Agency security practices
- Budget limitations



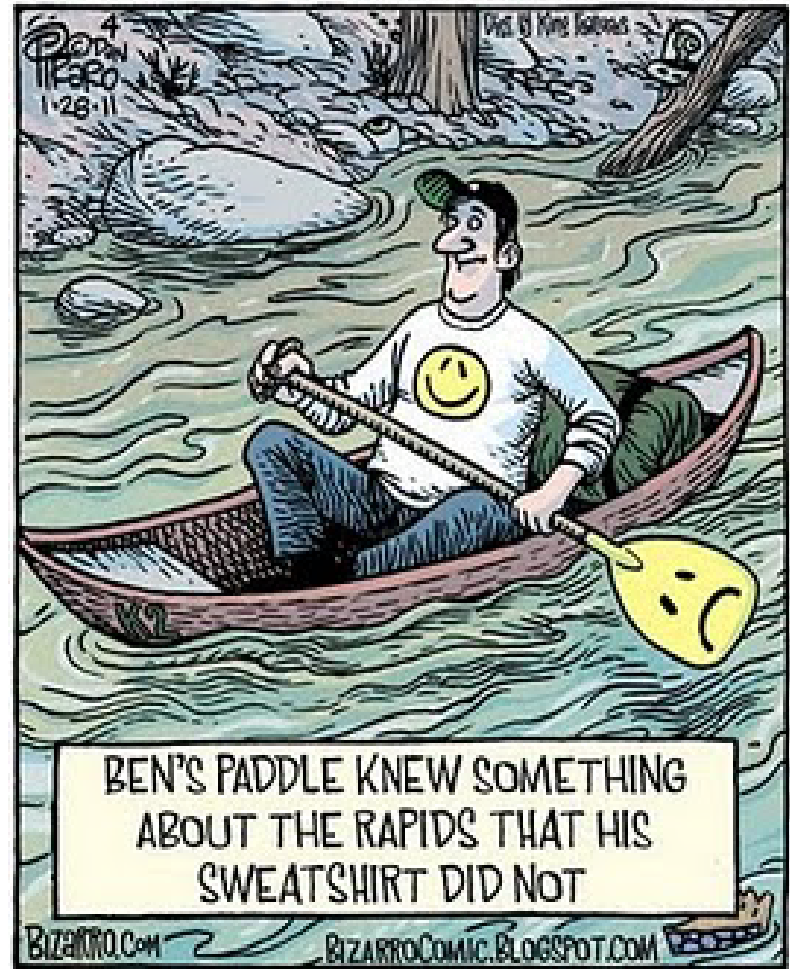
Governance Weaknesses

- State Data Center management had not established security standards or assigned overall responsibility for security
- Governance structure not effective for managing security



Summary

- Agencies rely on the State Data Center to provide a vital layer of security
- Weaknesses in the State Data Center affect nearly all state agencies



Application Controls - Oregon Benefit Information System (OBIS)

Erika Ungern, CISA
Principal Auditor

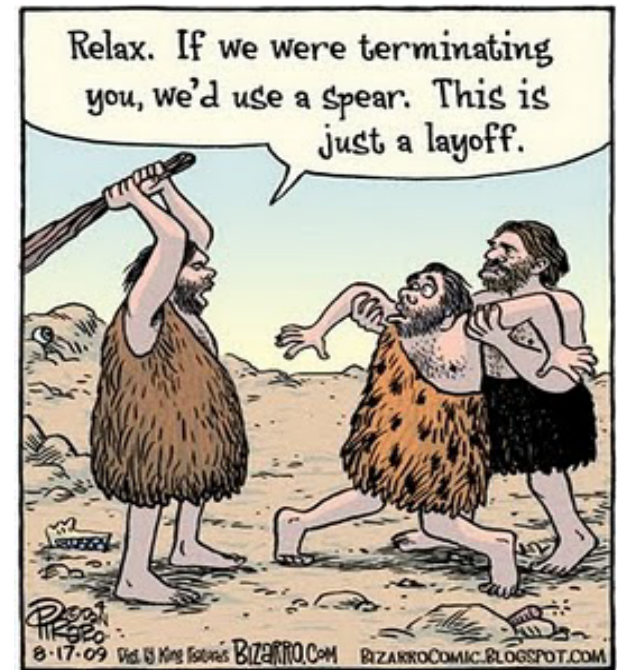
Audit Objectives

Our objectives were to determine whether:

- Controls provide reasonable assurance that Unemployment Insurance transactions remain complete, accurate and valid during input, processing and output.
- Changes to computer code are appropriately controlled to ensure integrity of information systems and data.
- System files and data are appropriately backed up and can be timely restored in the event of a disaster or major disruption.
- Systems and data are protected against unauthorized use, disclosure, modification, damage, or loss.

Background

- Unemployment Insurance (UI) provides partial wage replacement to workers who are unemployed through no fault of their own.
- The Oregon unemployment rate rose from 6.3% in January 2008 to 11.1% in January 2011.
- Regular benefits are paid for 26 weeks (funded through employer taxes).
- Extended benefit programs vary and are funded by various sources (mainly federal).
- Retroactive changes to laws may affect claims that have already been paid.



Background

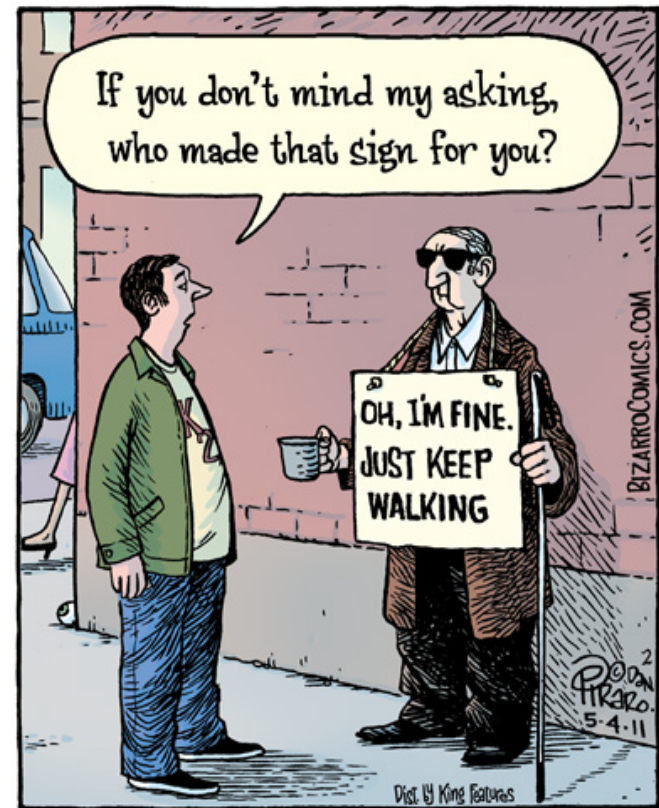
- The Oregon Employment Department (OED) uses OBIS to:
 - Calculate benefit amounts
 - Process and pay ongoing claims
- Accurate payments depend largely on accurate information from Claimants and Employers.
- Overpayments are inevitable.
- The most effective way to collect overpayments is to reduce future benefit payments.
- Timeliness of identification of overpayments and establishment of overpayment decisions is vital.

Application Controls

- Controls provided reasonable assurance that claims paid through OBIS were complete accurate, and valid.
- However, we found the department could:
 - Improve its handling of unusual or complicated claims.
 - Process overpayment decisions in a timelier manner.
 - Improve procedures for correcting certain overpayments.

Unusual or Complicated Claims

- Input control weakness:
 - Data entry was not reviewed to ensure they were valid or accurate.
- Output/error handling control weakness:
 - It was unclear whether system-generated reports showing possible errors were reviewed by staff.



Overpayment Decisions Not Timely

Time between Overpayment Identification and Setup	Overpayment Amount	Percent of Total
0 to 3 Months	\$13 million	31.7%
3 to 6 Months	\$4.7 million	11.5%
6 to 12 Months	\$17.6 million	43.1%
More than 12 Months	\$5.6 million	13.7%
Total	\$41 million	100%

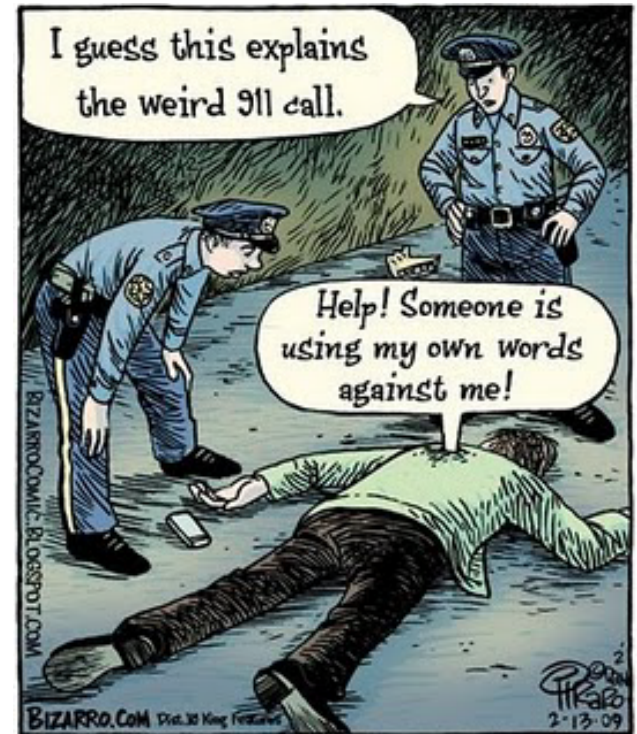
57% of overpayment “decisions” were not established (and therefore were not recoverable) until more than 6 months after discovery of the overpayment.

Overpayment Decisions Not Established

- An additional \$15 million in overpayments were not yet input into the system – about half had been identified more than 6 months prior.
- The surprise: Approximately \$6 million were not even in the queue to be processed as overpayments.
 - Weak tracking of documentation (manual or automated).
 - Extra staff was assigned to attempt to reduce the backlog – some of these staff made mistakes that resulted in source documents needed for overpayments to be generated.
 - Lack of automated controls to identify missing documents.

“Intentional” Overpayments

- In one type of situation, the “fix” for an erroneous payment made the situation worse.
- Business decision to pay a claimant twice for the same benefit week under two different benefit programs.



Intentional Overpayments - Example

- One claimant was paid \$482 per week for 12 weeks under an extended benefit program.
- Staff discovered these weeks should have been paid under a new claim that paid only \$179 per week. Therefore, the original payment was overpaid by \$303 for each week.
- To “fix” the situation, OED paid the same 12 weeks again for \$179 per week on the new claim. There was no recoupment of the original overpayment applied to the new payment, leading to a total overpayment of \$482 per week.
- The claimant submitted a hardship waiver and was not required to pay back any of the overpayment.

Intentional Overpayments

- Overall, treatment of these cases led to additional \$5.5 million in overpayments (added to \$4.1 million overpayment in the original payment).
- Management decision based on interpretation of laws (“prompt payment” and “due process.”)
- OED sometimes created “combination” decisions that allowed the new payment to be offset by overpayment amounts from the original payment, but:
 - Paperwork process for such decisions took 2-4 hours per case.
 - Limited resources available.
 - Business decision not to do these in every case.

Application Controls - Recommendations

- We recommend that department management take steps to better ensure accurate payment of Unemployment Insurance claims by establishing:
 - additional automated or manual processes to better prevent system input errors;
 - more robust error detection procedures to identify payment anomalies and ensure their timely correction;
 - procedures to ensure that identified overpayments are monitored to ensure that associated overpayment decisions are appropriately generated;
 - staffing requirements for the overpayment unit to ensure timely processing of overpayment decisions; and
 - procedures for correcting overpayment errors that ensure compliance with federal regulations.

Special Projects & System Development – EROAD Pilot

Neal Weatherspoon, CPA, CISA, CISSP
IT Audit Manager

Special Projects & System Development



Our IT audit team sometimes gets the nod to evaluate a new system or technology.

Eg. Data center consolidation, MMIS implementation, Statewide Identity and Access Management, PERS systems.

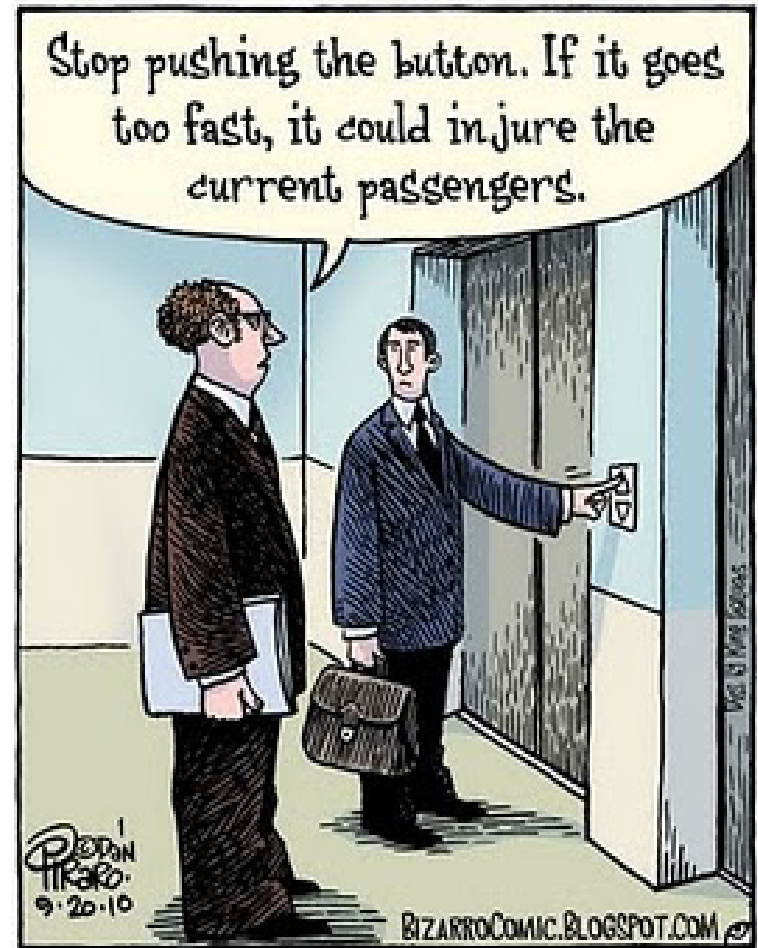
The Unusual Request



Can you..
....Should you..
.....Will you..
Audit an emerging
technology....
Operated by a foreign
entity....
In the Internet cloud?

Auditing In the Cloud– Objective #1

Determine whether EROAD web-based services provides a secure and stable environment for transmitting, processing and storing carrier weight-mile tax information.



The Test – Objective #2

Determine whether the EROAD system accurately and reliably captures and calculates Oregon weight-mile tax information to meet record-keeping requirements of OAR 740-055-0120.



ODOT's Part – Objective #3



Determine whether ODOT established an appropriate and secure electronic interface for accepting carriers' system-generated weight-mile tax information.

Results



- The system accurately and reliably captured and calculated weight-mile tax information.
- EROAD provided a secure and stable processing environment.
- ODOT had not yet developed an electronic interface.

Credits

A special thanks to Dan Piraro, creator of the syndicated newspaper cartoon, Bizarro, for his written permission to use his work to help liven this otherwise dull audit presentation.

To enjoy more of Dan's work go to <http://bizarrocomics.com/>