Continuous Auditing

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Notes:
## Agenda

- Relationships: Continuous Auditing, Monitoring and Assurance
- What are the benefits of Continuous Auditing
- What are the Challenges to Continuous Auditing
- How might Continuous Auditing be implemented?
- What should the objectives be for Continuous Auditing?
- Approaches to Continuous Control and Risk Assessment

### Notes:
Continuous Auditing Defined

- **IT Continuous Auditing Defined**
  - Utilization of automated tools to analyze data from systems for trends, outliers, discrepancies and control gaps

- **Non IT Definition**
  - A process designed to provide a proactive identification of potential control issues, on a regular and ongoing basis, that could be occurring in various processes

**Notes:**
Continuous Auditing: Implications for Assurance, Monitoring, and Risk Assessment

Notes:
Relationships: Continuous Auditing, Monitoring, Assurance

CONTINUOUS ASSURANCE

Continuous CONTROLS Assessment  Continuous RISK Assessment  Assessment of Continuous MONITORING

Source: IIA GTAG – Continuous Auditing

Notes:
IIA Definitions

- **Continuous Auditing**
  - Method used to perform audit-related activities on a continuous basis – includes control and risk assessment
  - Performed by Internal Audit

- **Continuous Monitoring**
  - Processes to ensure policies/processes are operating effectively and to assess adequacy/effectiveness of controls
  - Performed by operational/financial management; audit evaluates adequacy of management activities independently

- **Continuous Assurance**
  - Combination of continuous auditing and audit oversight of continuous monitoring

Source: IIA GTAG – Continuous Auditing

Notes:
Continuous Auditing vs. Traditional Auditing

- In the traditional audit model, a period of time passes between the completion of fieldwork and audit report issuance
  - Audit report information may be less useful or beneficial to the auditee
  - Actual findings or nature of resolutions may be impacted by the timing
  - Extended audit timing may impact customer relations

Notes:
Continuous Auditing Benefits

- Audit process becomes faster, cheaper, more efficient and effective
  - Shortens audit cycle times providing more timely risk and control assurance
  - Achieves greater audit coverage without increasing audit staff and other resources
  - Automates more audit testing
- Audits 100% of data instead of just samples
- Improves assurance quality as well as speed

Source: PwC – 2006 State of the Internal Audit Profession Study
Continuous Auditing Focus

- Primary focus of the respondents’ continuous auditing:
  - 27% - monitoring risk attributes to identify changes in risk profiles
  - 26% - audit tests to verify control effectiveness
  - 20% - fraud detection
  - 17% - monitoring individual controls to identify control deficiencies
  - 10% - monitoring key performance indicators to identify deteriorating business activities

Source: PwC – 2006 State of the Internal Audit Profession Study

Notes:
Where Are We Today?

- PricewaterhouseCoopers – 2006 State of the Internal Audit Profession Study:
  - 81% of 392 companies responding to questions about continuous auditing reported that they either had a continuous auditing or monitoring process in place or were planning to develop one
  - That was a big OR, close to today’s percentages; the picture hasn’t changed that much

Source: PwC – 2006 State of the Internal Audit Profession Study
Tool/Software Implications

- Acknowledge that a tool can “assist” in the facilitation of the process but it should not be the initial driver.

- **Technology is an enabler**
  - Used to trend/extract/match/sort data

- **Initial step of Continuous Auditing should be:**
  - Planning of program, linkage of program strategy to department strategy, identification of program objectives, analysis of department resources

- Without a plan, the tool can be rendered cumbersome and inefficient.

**Notes:**
Data Analysis Software Tools Improve Internal Audit Capabilities

- Increases audit efficiency through more detailed, flexible analysis of data; trend analysis
  - Enables sorting, viewing, analysis of samples in large amounts of data
  - or 100 percent tests
- Detects potentially fraudulent activities
- Internal audit function now provides data to management and external auditors
- Helps obtain error frequency
- Helps monitor control continuously... (eventually?)

Notes:
Data Analysis Tools Today

- Software used by study participants, IIA 2009
  - 76.1 percent use data analysis
  - 19.6 percent do not
  - 4.3 percent — not applicable

- Top 3 tools for data analysis: ACL, Excel, Access
  - Secondary tools: Access, ACL, Excel
  - Others listed: Excel, IDEA, Oracle Apex Database, PeopleSoft, Proprietary Data Extraction, and Showcase Query, ARC and Access

Notes:
Other than ACL...

- IDEA – “Awesome ability to seek anomalies”
- Crystal Reports – “… the most flexible of our software”
- Application queries - easy access to information
  - Such as tools used with SAP and Oracle Financials
  - Able to extract information from corporate systems
  - Does not require code development (a real plus)
- Excel - Small data extracts can be manipulated
- MS Access
- Proprietary, in-house developed tools

Notes:
Beyond the Tools

- Auditor must be able to **define the rule of the control**
  - Invoice payment not to be entered and approved by the same person
  - Payments > $X must be approved by Y
  - Inventory items shipped must be matched by invoice details
  - Authority levels must meet policy requirements

- Indicators of **control breaches** need to be able to be established
  - Transactions that fall outside of statistical norms
  - Profile/trend analysis
  - Unusual "one-off" transactions

Notes:
Continuous Auditing Challenges

- When asked to describe their principal challenges in establishing a continuous auditing program:
  - 37% - defining activities to be audited
  - 20% - deploying technology
  - 18% - obtaining internal support
  - 13% - determining whether a business unit or internal audit should conduct the monitoring
  - 12% - cost (least selected category)

- 80% = challenges associated with “planning”!

Source: PwC – 2006 State of the Internal Audit Profession Study

Notes:
Continuous Auditing Challenges cont’

- Implementation of continuous auditing is moving slowly
  - Achieving its objectives are resource-intensive and expensive when starting from scratch

- Options for implementing continuous auditing:
  - Hire more auditors and do more frequent audits
    - It’s a start... unlikely today’s financial climate
  - Use audit software, reporting and interrogation tools
    - Most have these and aren’t using them to the fullest

Notes:
Continuous Auditing Challenges cont’

- Process takes a while to implement correctly, based on the organization’s needs
  - Application system changes may derail parts of your project
- Auditors determine parameters to be used
  - Auditors need to have detailed knowledge of the underlying data structures to use the tool correctly
- Organization may not welcome early reports generated by the tool

Notes:
Continuous Auditing Challenges cont’

- Tools and concepts are not always user friendly
  - Different types of training are required
- Tools already used by audit, such as older versions of Excel or Access, can’t analyze large volumes of data
  - Same is often true for even 2 year old laptops
- Accessing data may sound easy, but still hard
  - Difficult to obtain data stored in multiple systems
  - Formats not conducive to use with audit software
  - Same for many legacy systems still in use

Notes:
Continuous Auditing Components

- Components of Continuous auditing:
  - continuous risk assessment
  - continuous control assessment

Notes:
Continuous Risk Assessments

- Audit activities that identify/evaluate companywide risk levels by examining trends and comparisons within a single process or system. Processes are then compared to their past performance and other business systems.
- Assessments can include the evaluation of detailed transactions against a cut-off point and a comparative analysis on a summary of the transactions.
  - Ex: - measuring the number of purchases from the same vendor that are just below a purchaser’s authority level. The more this occurs, the more concerns about the proper and consistent functioning of the controls over purchasing.

Notes:
Continuous Control Assessments

- Continuous control assessments enables individual transactions to be monitored against a set of control rules that determine if internal controls are functioning as designed and that highlight exceptions.

- A well-defined set of control rules warns organizations when process or system controls are not working as intended or are compromised.

- By identifying control weaknesses and violations, auditors can let audit committees and senior management know whether controls are working properly.

Notes:
Continuous Control Assessments

- Continuous control assessments don't need to occur in real-time.
- The frequency depends on the control's risk level and the degree to which management is monitoring the controls.

Notes:
Implementing Continuous Auditing

- Prior to acquiring Technology.....
  - Auditors need a strong understanding of the concepts involved
  - Establish and fully define a foundation to effectively implement the entire process in the organization
  - Obtain appropriate buy-in and understanding from all levels of management
  - Communicate with the Audit Committee regarding:
    - Benefits
    - Impact on Audit Plan
    - Impact on Resources

Notes:
Understanding the Implications

- A Continuous Auditing program may require:
  - Introducing a new methodology of auditing to the audit staff as well as to the organization
  - Specific training and risk approaches to audit processes
  - Developing a new analysis tool
  - Developing a new reporting protocol and reporting process
  - Potential need for increased budget hours and dollars to develop program and support various aspects of the program

Notes:
Understanding the Implications

- The results will not be linked to a specific audit necessarily, nor will the level of assurance be as high as if a full audit was conducted.
- A formal audit report may not even be issued.
- The audit committee, management function, and internal auditors will have to realize the implications this may have on future audit reports and findings.
- Auditors must be prepared to manage and report the results obtained.

Notes:
Effective Continuous Auditing

- The key to effective use of continuous auditing:
  - Develop a good understanding of the main business processes and the associated information systems and infrastructure (i.e., their controls and the data contained therein).

- The adoption of continuous auditing will not only require auditors to have knowledge of information systems, but also enable them to analyze the data.
  - How is this different than current requirements for auditing? Or is it?

Notes:
Effective Continuous Auditing

- Continuous Auditing is a Methodology not an audit project.
  - Requires a defined process
  - Technology is an enabler not the process
- Qualified staff to execute
  - Assumes the audit function will have a strong understanding of data processes by BU and the relationship of the data to the data sources

Notes:
Effective Continuous Auditing

- Requires an allocation of time and patience for trial and error in developing the process
  - Time to develop the process
  - Time to communicate the process
  - Time to train auditors and business process owners

Notes:
Continuous Auditing Strategy

- Audit management commitment is a must!
  - Extensive up-front planning
  - Auditors need to have expertise in both IT and business

- Need to pick the right area
  - Reliable systems – you need reliable information
  - You need to determine what data is necessary, find the data, extract the data and analyze the data

- It’s not going to happen unless management is committed to the costs, resource and time commitments
Continuous Auditing Strategy

- Remember technology is an enabler: Software tools should be used to drive continuous auditing not be continuous auditing

- However, software tools do provide:
  - Controlled repository for data
  - Assist to configure tests and vary parameters
  - Can manage workflow

- When do we assess need for tool?
  - Late in Phase II or into Phase III (discussed later)

Notes:
Continuous Auditing Strategy

- Start small, achieve success ... move to more solutions
- Look for quick pay-back opportunities
  - Account Payable
  - Procurement
  - Payroll
  - Travel and Expense
  - Security - Separation of Duties
- How frequently should reviews occur?
  - Quarterly, monthly, weekly, daily, hourly?
  - Real-time?

Notes:
Continuous Auditing - A Phased Approach

**Phase I (Methodology Development)** consists of the overall development and documentation of the methodology.

**Phase II** (Process Level Risk Assessment)
- Identify Key Risks
  - Select processes with highest risk/fraud/control exposure
  - Assess levels of risk in areas identified
  - Identify key systems, processes and data sources

- Identify Control Objectives
  - Develop Corporate Tolerance Matrix
  - Identify key control points
  - Understand control objectives/rules
  - Understand exceptions and/or irregular activity

**Phase III** (Audit Development and Test Approach)
- Design Test Approach
  - Establish control failure definitions
  - Define indicator thresholds that may result in exceptions
  - Determine detailed tests to monitor transactions

**Phase IV** (Continuous Testing and Reporting)
- Execute Testing Process
  - Determine frequency for testing
  - Define data for testing
  - Identify source of data
  - Analyze data and identify risk indicators
  - Investigate indicators and conclude

- Reporting
  - Identify reporting to:
    - Process Owners
    - Management
    - Audit Committee
  - Prepare regular reporting

**Notes:**
Configuring Control Objectives/Rules

- Rules used in each audit area need to be established and adequately documented.

- When defining control objectives/rules auditors should consider the cost benefits of error detection and audit and management follow-up activities.

- If thresholds are too low, exceptions may be too high and result in increased follow-up and operational costs.

- Regularly reevaluate if error detection and follow-up activities need to be continued, reconfigured, temporarily halted, or used on an ad hoc basis.

Notes:
Control Objectives Within a Process

- Each process may have numerous control objectives
- Not all control objectives are applicable to continuous auditing
- Some control objectives may cycle on and off your continuous auditing process
- Decision on what control objectives to include will depend on:
  - Available resources
  - Risk impact
  - Management tolerance
  - Impact to audit plan

Notes:
Prioritizing Control Objectives

- Consider:
  - List major control objectives in each process
  - Prioritize control objectives risk in relation to the process
    - Risk is more than $$
  - Prioritize ability to develop a continuous auditing step for each control objective
  - Rank which control objectives will be addressed in your continuous auditing program

- Maintain your listing for future review or changes

Notes:
Always Validate the Data

- Electronic data is no different from other audit evidence, except that it requires special tools to evaluate.
- For use in continuous auditing first need to ensure data accuracy, completeness, and integrity:
  - Agree the data to a trusted source
  - Validate the data manually (once?)
- Design validation checks into your process

Notes:
Be Sure to Understand What Constitutes a “failure”

- Important to “consider” the concept of “exception” vs. “failure” in identifying your control rules
- If concept not properly considered, results may:
  - Be voluminous
  - Not representative of tolerance level to organization
  - Timely to research and then react

Notes:
Delivering the Results

- Concentrate on providing business intelligence on controls and operations, not just lists of errors

- Establish how audit will deliver results of continuous auditing to the business units
  - Standard audit reports not as effective for continuous auditing
  - Dynamic reporting ... must change as information changes

- Real-time vs. static reporting
  - Caution: instant reporting can be misleading, can affect audit’s reputation
  - Spend time reviewing the results before you share them

Notes:
Questions?

Thank you

Notes: