Institute of Internal Auditors

Dallas Chapter

August 6, 2009
Outline

• Why perform a Risk Assessment
• Risk Assessment Approaches
• What is Risk?
• Audit Universe
• Risk Model

• Risk Factors and Weighting
• Risk Scoring Preparation
• Risk Scoring
• Risk Ranking
• Audit Plan
Why should Internal Audit Perform a Risk Assessment?
Performance Standard 2010 - Planning

• CAE establish risk based plans to set priorities
• Based on risk assessment done at least annually
• Supported by Practice Advisory 2010-2
Outdated Approach to Audit Planning

Old audit planning methods

• Audit Director looked at universe and decided on plan by intuition
• Cycle audits
Up-to-date Approach

• A more thoughtful, objective risk based approach to plan
• Allocation of audit resources
• Developments during year can cause a change in plans
What is Risk?
Audit Universe

• The first step – identify auditable entities
• Departments (Organizational Chart), processes, geographical locations
• Auditable entities defined in a way that makes sense, get meaningful results, complete in timely manner
Risk Model

- Developed specifically for an organization
  - Risk factors
  - Risk factor weights
  - Scoring
  - Score accumulation
- Today’s Risk Model is what we use, what was used at The Associates and was adopted by Ford Motor Co.
Internal Audit Risk Model

Risk Factors

**Commonly Considered Risk Factors Include:**

- Adequacy and effectiveness of the system of internal control
- Ethical climate and pressure on management to meet objectives (tone at the top throughout the organization)
- Competence, adequacy, and integrity of personnel
- Acceptance of audit findings and corrective action taken
- Liquidity of assets
- Organizational, operational, technological, economic, accounting law and regulation changes
- Political climate locally and internationally
- Impact of customers and suppliers
Risk Factors cont.

• Government laws and regulations
• Sovereign risk
• Financial and economic conditions
• Competitive conditions
• Complexity of activities (products, services, operations, functions)
• Degree of automated systems and their complexity
• Size of the unit
• Unit training and staff education
• Morale
• Age of systems
• Volume of transaction throughput
• Management and key personnel turnover
Risk Factors cont.

Similar factors were grouped together into a single risk factor to be used as part of the consideration in the scoring process for the risk factor. This provides flexibility and makes the risk assessment process more thorough.
Risk Factors and Items To Consider

1. **Internal Control History**

*The control environment:*
- ethical climate and pressure on management to meet objectives; 
- competence, adequacy, and integrity of personnel; management philosophy and operating style; management assignment of authority and responsibility; organizational understanding; development and training of people; attention and direction provided by the board of directors

*The extent of risk assessment:*
- the establishment of objectives; identification and analysis of risks to the achievement of the objectives; determination of how the risks should be managed
The control activity effectiveness:
the results of the last internal audit or risk assessment or special investigation or external audit management letter; acceptance of audit findings and corrective action taken; fraudulent activity

The information and communication effectiveness:
relevant internal and external information is communicated in a form and timeframe for people to carry out their responsibilities, control the business, make decisions, report externally; effective communication in all directions; effective communication with customers, suppliers, regulators and stakeholders

Monitoring effectiveness:
ongoing monitoring provided by management review and measurement activities; actions personnel take in performing their duties; internal and external audit activities
2. Change
Changes in systems, processes, personnel (reorganization, management and/or employee turnover), business activity (significant increases or decreases), products/customers/market, financial reporting (accounting principles or transactions), applicable laws and regulations.

3. Outside Influence
Degree that unit is affected by laws and regulations and the penalty for non-compliance; degree that unit has contact with customers, suppliers, investors, public and that the contact could result in loss of reputation or lawsuit; degree that unit is exposed to adverse financial and economic conditions.

4. Customer Service (External and Internal)
The extent that customer service is a part of the unit and that failure to provide efficient, safe, effective, reliable service negatively impacts the operation and/or perception of the organization.
5. **Complexity**

System processing (multiple systems in use, user friendly, outdated technology); operational complexity based on the products, processes, functions, services provided.

6. **Materiality and Liquidity**

The extent that size of the unit could affect the potential loss or error to the organization can be determined by the size of its balance sheet items or transaction throughput. Off balance sheet items should also be considered. Liquid assets are susceptible to conversion: availability of cash, cash disbursements, wire transfers, check stock, credit cards, marketable securities.
Risk Factor Weighting

• The risk factors are weighted to reflect the relative importance of each. Relative importance represents the impact each risk factor has on business units based on likelihood and severity.

• The following weightings were done judgmentally to determine the weight a particular risk has in relation to the other risk factors. Weightings could have been done mathematically. The weighting in our model is:

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internal Control History</td>
<td>25%</td>
</tr>
<tr>
<td>2. Change</td>
<td>20</td>
</tr>
<tr>
<td>3. Outside Influence</td>
<td>15</td>
</tr>
<tr>
<td>4. Customer Service</td>
<td>15</td>
</tr>
<tr>
<td>5. Complexity</td>
<td>15</td>
</tr>
<tr>
<td>6. Materiality &amp; Liquidity</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

• Internal control and change are always going to be a significant part of the risk factors considered.
Preparation for Risk Scoring

• Auditable entities assigned to audit personnel
  – Director interviews VP’s and above
  – Staff interviews AVP’s and selected others

• Prepare for interviews
  – Review prior audit reports, pre audit files, business plan, prior risk assessment
  – Personnel have had experience in the entity
  – Knowledge breeds confidence

• Current knowledge from interviews and past experience will help in risk scoring and be the basis for the scores
• Organized in Customer Service teams is helpful
Risk Assessment Discussion Guidelines

General

1. What is the organization, the key people, and major/critical activities of each unit
2. What are business objectives of the department
3. How do the objectives/goals support the overall vision/mission
4. What could prevent the department from achieving its objectives
5. What are your greatest concerns or risks
6. What systems do you rely on for information and monitoring and to achieve objectives
7. What are the business systems and processes and who owns them or uses them (interrelationships). Who are your suppliers and customers
8. What are contracted relationships
Internal Control

Environment:

1. Is there undue pressure to meet goals (financial or operational)
2. How are ethical values communicated and measured
3. Are there enough of the right (qualified) people to do the job and are they trained
4. Do personnel understand the unit objectives and organization and their role
5. Has authority, responsibility and accountability been communicated at all levels
6. Is direction and attention provided by management and the Board of Directors
Internal Control

Risk Assessment:
1. Are objectives established and communicated
2. Are risks to the objectives identified and analyzed
3. Are risks addressed and managed

Control Activity:
1. Has any required corrective action been taken from any audits (internal, external, regulatory)
2. Has there been any fraudulent activity or violation of policies or regulations
3. Is there significant activity with outside contractors
Internal Control

Information and Communication:
1. Is relevant internal and external information communicated in a form and a timely manner for people to carry out their responsibilities, control the business and make decisions
2. Is information available in a timely manner to measure effectiveness and efficiency and achievement of objectives and key performance indicators
3. Is there effective and timely communication and information flow in all directions (up, down, across)
4. Is there effective and timely communications and information flow with customers, vendors, regulators and stakeholders

Monitoring:
1. Is there ongoing monitoring by management in review and measurement activities
2. Is there audit or quality assurance activity
Change

1. Are there any changes that have been made in the past year, or that are anticipated to be made in the next year, in systems or processes

2. Has there been any reorganization or management change or high employee turnover

3. Has there been a significant increase or decrease in business activity

4. Has there been a change in laws or regulations

5. Has there been or will there be any significant budget reductions or additions and what will be the impact ability to achieve objectives
 outside influence

1. How much is the unit affected by laws and regulations and what is the penalty for non-compliance
2. How much contact does the unit have with customers, suppliers and the public and the contact could result in loss of reputation or lawsuit
3. What is impact on unit of adverse economic conditions

Customer Service (External And Internal)

What is extent of customer service of the unit and that failure to provide safe, efficient, reliable service negatively impacts the unit and/or the perception or reputation
Complexity

1. Is there added complexity brought about by system processing due to multiple systems in use or complex interfaces or non-user friendly systems or outdated software/hardware technology
2. Is there added complexity based on services offered, functions, processes, and interfaces with other units

Materiality And Liquidity

1. The extent that size of the unit (transaction throughput or balance sheet or off balance sheet items) could affect the potential loss or error
2. The extent that there are liquid assets in the unit that are susceptible to conversion (cash, cash disbursements, wire transfers, check stock, marketable securities, credit cards)
Scoring

- Within each auditable entity in the audit universe, each risk factor will be scored on a scale of 0 to 4 for both likelihood and impact of the risk (absent any control consideration). The scale in our model is as follows:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>NA or very low risk</td>
</tr>
<tr>
<td>1</td>
<td>Low risk</td>
</tr>
<tr>
<td>2</td>
<td>Medium risk</td>
</tr>
<tr>
<td>3</td>
<td>High risk</td>
</tr>
<tr>
<td>4</td>
<td>Very high risk</td>
</tr>
</tbody>
</table>

- The audit team will meet to score each auditable entity
- Not everything is high risk and not all risk can be addressed – must be realistic and not “medium” on all.
- The score will be multiplied by the risk factor weight for both likelihood and impact.
Scoring cont

• The likelihood and impact scores will be added together for the total risk points for the auditable entity.
• The reason / justification for the score is documented in the system for reference
• The auditable entities will then be ranked by risk score
When scoring, these type questions concerning risk would be considered

*If this risk happens:*
Will it result in violations or noncompliance with laws and/or regulations?
Will it cause a shutdown of Agency operations?
Will it cause the agency to lose federal funds?
Will it result in other significant loss of funds?
Will the Agency lose customers?
Will it result in a decrease in operating effectiveness or efficiency?
Will it expose the Agency to legal liability to customers or other parties?
Will it result in incorrect or unreliable financial reporting?
Will public perception of the Agency be adversely affected?
Will the agency’s capacity to obtain debt financing be impaired?
Will it result in the loss of sales tax revenue?
Will it have a negative impact on safety?
Rankings 1 through 4 – Suggested Definitions

**IMPACT**

1 **Low** – Impact on effectiveness and efficiency of operations, but impact not significant. Violation of regulations with little, if any, impact. Immaterial financial impact

2 **Medium** – Impacts effectiveness and efficiency. Financial impact is significant (> .1 % of operating budget) but not material. Violation of laws or regulations carries a small financial or perception impact

3 **High** – Impacts effectiveness and efficiency in a material manner and/or a material financial impact (> 1% of budget), incorrect financial reports, negative impact on customers, violation of Laws & Regulations with associated penalty, Impact on debt financing, revenue, public perception

4 **Very High** – Catastrophic impact including shutdown of operations or a major segment of the operations, severe impairment of operations, violation of laws and regulations resulting in major fines or penalties, or a significant catastrophic financial impact
**LIKELIHOOD**

Given 100 chances to occur, this risk would occur:

<table>
<thead>
<tr>
<th>Occurrences</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>0 – Very Low</td>
</tr>
<tr>
<td>5-10</td>
<td>1 - Low</td>
</tr>
<tr>
<td>10-25</td>
<td>2 - Medium</td>
</tr>
<tr>
<td>30-40</td>
<td>3 – High</td>
</tr>
<tr>
<td>50-100</td>
<td>4 – Very High</td>
</tr>
</tbody>
</table>
Audit Plan

• Entities ranked by risk score
• Board/Audit Committee requests
• Management requests
• Entity goes no longer than 5 years without presence
• Type of work to be done is identified
  – Full scope
  – Rifle approach
  – Follow up
  – Proactive (new process, new system)
• Prepare the plan in light of resources
• Take to Audit Committee for approval
Al Bazis, CPA
Director of Internal Audit
Dallas Area Rapid Transit
abazis@dart.org