Enterprise Risk Management
How Does ERM Apply to your Credit Union?

Presented by
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Moss Adams LLP
MOSS ADAMS AT A GLANCE

- Full service public accounting firm with assurance, tax, and consulting services for middle-market public and private companies
- Largest accounting firm headquartered in the West and one of the 15 largest in the United States
- 21 offices in California, Arizona, New Mexico, Oregon, Washington and Kansas
- More than 230 partners and over 1,800 staff
- Founded in 1913 and headquartered in Seattle, Washington
- A founding member of Praxity, a global alliance of accounting firms
- We are the 4th largest firm servicing credit unions in the nation (based on assets)
TODAY’S DISCUSSION OBJECTIVES

• What is Enterprise Risk Management? – an Overview of ERM
• What is Driving ERM?
• How ERM Can Benefit My Institution
• How My Institution Can Build an ERM Strategy: Implementation Overview
  o Phase 1 – Planning
  o Phase 2 – Implementing the Plan
  o Phase 3 – Refining
• Summary
WHAT IS ENTERPRISE RISK MANAGEMENT ("ERM")?
ENTERPRISE RISK MANAGEMENT

“The decline and ultimate failure of some great companies has been a historical fact. But such decline is not inevitable. Rather, it results when corporate leaders (CEO’s and directors alike) don’t anticipate and deal with the long term threats facing their companies.”

WHAT IS “ENTERPRISE RISK MANAGEMENT”? 

“Enterprise risk management (ERM) is a process, effected by an entity’s board of directors, management and other personnel, applied in a strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.”

The Committee of Sponsoring Organizations (COSO) of the Treadway Commission, (Sept. 2004)
WHAT IS ERM?

- A structured, consistent, and continuous risk management process that is applied across the entire organization
- Identifies, assesses, prioritizes, and manages the internal and external risks that impact the organization
- Driven by a decision-support process that is aligned with the management and execution of strategic objectives
- Enhanced by the assignment of roles and responsibilities, reporting and communication, policies and procedures, and adoption of a risk-based culture
Keys to a good ERM program – must include:

• Risk Identification
  – What are our key risks?
  – What level of risk are we willing to allow/accept (“risk appetite”)?

• Risk Measurement
  – Risk measurement models (ALM, Credit Stress)
  – Guidelines and quantification tools (Credit Risk Classification, Operational and Credit Losses)
ENTERPRISE RISK MANAGEMENT (ERM) COMPONENTS

• Risk Control
  – Policies (Required and Best Practice)
  – Authorities and oversight systems

• Risk Monitoring
  – System of risk reporting – key measurements
    ▪ Board driven assessments (internal and external audits, monitoring reports)
    ▪ Management Self assessments (management generated reporting against pre-set standards)
IN A NUTSHELL…

ERM is a process for managing and controlling risks across an entire organization, both within and across business lines and legal entities.
WHAT’S DRIVING ERM?
DRIVERS OF ERM – A SUMMARY

Board of Directors • Demand increased financial disclosure and transparency

Members as Stakeholders • Demand evidence that management understands and manages risk

Regulators/Rating Agencies • Seek assurance around compliance and risk assessment processes

Activists • Demand social awareness, safety & environmental consciousness

Members as Customers • Make decisions based on differentiating factors

Peers • Comparison with others drives industry-wide practice

Competitors • Push innovation, drive leadership
BENEFITS OF ERM
BENEFITS OF ENTERPRISE RISK MANAGEMENT

- Enhances integrated decision-making better deal with the risk from growth, mergers, new products, etc.
- Better align risk and strategy.
- Framework for identifying enhance return opportunities – improved risk mitigation.
- Improve deployment of capital resources – allocating capital to business areas to achieve superior risk returns.
- Credibility and confidence in governance and risk management – members, regulators, external auditors.
- Anticipate risk – seize opportunities/minimizing cost.
- Improved understanding and management of interactions and interrelationships between risks.
- Clear accountability and ownership of risk.
- Regulatory compliance with safety and soundness guidelines, foundation for a strong internal control environment.
BENEFITS OF ENTERPRISE RISK MANAGEMENT (CONTINUED…)

All the previous positively impact:

- Protection of capital.
- Enhancement of earnings.
- Reduction of losses (Fraud, Credit, Operational).
- Greater efficiency in process flows.
- Better defined/more efficient internal audit programs.
- Better understanding of effect of market movements.
ERM IMPLEMENTATION PHASES

Detective controls and processes

Preventative Controls and processes

Proactive planning and improvement

Compliance and Prevention

Operating Performance

Enhanced Member Benefits

GRADUAL EVOLUTION OF THE PROCESS
LET’S DO A QUICK SELF ASSESSMENT

• Go to the separate handout

• Complete the “Risk Oversight Self Assessment” survey
  – There are no right or wrong answers
  – Try to objectively answer each question for a credit union you have in mind
## SELF ASSESSMENT - IMPLICATIONS

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<th>Q 13-28</th>
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<tr>
<td>Yes</td>
<td>No</td>
<td>Lots of focus on strategic planning, lots of risks, but few risk management processes</td>
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<tr>
<td>Yes</td>
<td>Yes</td>
<td>Strategic planning and risk management are reasonably integrated and organization making great ERM progress</td>
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<tr>
<td>No</td>
<td>Yes</td>
<td>Few perceived strategic risks but overspending on ERM processes</td>
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<tr>
<td>No</td>
<td>No</td>
<td>Few perceived risks, but no system to be sure or to identify risks-opportunities</td>
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LINKING ERM TO STRATEGY

- Strategic Integration
- Risk vs. Return Optimization
- Risk Management
- Risk Measurement
- Loss Minimization
- Compliance/Monitoring

Maturity Level

High

Low

Time

Risk appetite articulated

Compliance/Monitoring
ERM – STRENGTHENING FOCUS ON STRATEGIC RISK EXPOSURES

Risk Drivers → Increased Loan Yield (Rate & Volume) → Increased Revenues
Risk Drivers → Non-interest Income Products → Profitability
Risk Drivers → Reduce Head Count
Risk Drivers → Other Cost Savings Measures – Vendor Mgmt.
Risk Metrics?
Risk Metrics?
Risk Metrics?
Risk Metrics?
THE MOSS ADAMS PHASES TO ERM IMPLEMENTATION

• STEP 1 – PLANNING – (a.k.a., “putting your best foot forward, knowing the process isn’t going to be perfect because it’s a new area of focus, and every institution is unique”)

• STEP 2 – IMPLEMENTING – (a.k.a., “executing on your plan, making slight adjustments as needed; saving significant revisions to the process for the “refining” stage”)

• STEP 3 – REFINING – (a.k.a., “fixing what needs to be fixed and/or what wasn’t addressed after implementing your plan”)

_A simple 3-step process for getting your ERM program off the ground_
ERM IMPLEMENTATION PHASE 1 - PLANNING
BUILDING YOUR ERM ROADMAP/IMPLEMENTATION PLAN: STEP #1 – PLANNING

A. Gain Board/Committee/Executive level of support - “Tone at the Top” might be the single biggest factor in being successful at implementing; start to build consensus/buy-in

B. Revisit/review your strategic plan – the ERM vision s/b aligned with your organization’s size/complexity

C. Start thinking about how you are going to identify (and categorize) risk
GAIN BOARD/MEMBER/EXECUTIVE MANAGEMENT LEVEL SUPPORT

• It’s that CULTURE thing!!
• Mutual Expectations, Respect, Reliance
• Open Communications, Debate
• Welcome the Messenger
• Welcome Dumb Questions
• Draft Policies
ERM POLICY

• Policy Statement
• Purpose/objectives
  o Integrated mgmt of risk
  o Governance of risk oversight
  o Independent review and monitoring
• Responsibilities
  o Board of Directors
  o Supervisory Committee
  o Board Risk Committee
  o Management Risk Committee
  o CEO
  o CRO
  o Internal Auditor
  o Department Heads
• Risk Categories
• ERM Process
• Policy Guidelines/Limits

• Risk Metrics and tools
  – Risk Assessments
  – Measures
• Controls & Monitoring
• Risk Response
• Communication & Reporting
• Policy Exceptions
ERM CHARTER

• Purpose/Objectives – Board/Committee delegation to:
  Identify and Manage risks
  Adhere to policies

• Committee Members and Chair
  Chief Risk Officer direct report

• Meetings
  Full Board reporting

• Duties and responsibilities
  Supervisory Committee interaction
  Oversight of Management Risk Committees

• Performance Evaluation

• Committee Resources
ERM IS A SHARED RESPONSIBILITY: TYPICAL ROLES/NEEDS

Board of Directors
- Governance
- Reputational Risk
- Board Training

CEO/COO
- Business Risk
- Execution Risk
- Strategy/Mergers

CFO
- Internal Controls
- Economic Capital
- Performance Measurement

CRO (Larger)
- ERM Roadmap
- Policies/Limits/Appetite
- Risk Quantification
- Dashboards

Functional Risk Managers/Delegated Responsibilities:
- Credit Risk
- Market Risk
- Interest Rate Risk
- Operational Risk
- Compliance Risk
- Technology Risk
- Etc.
A VISION FOR ERM IS FUNDAMENTALLY LINKED TO STRATEGIC GOALS FOR YOUR ORGANIZATION

• What are your core competencies? What is your market? What does your credit union want to be? Who are your members?
• What are your return goals?
  • (Risk vs. Reward = Credit & IRR; Capital Adequacy; Regulatory; Fraud; Other?)
• Identify Risks to your credit union – What risks do you take-on to generate these returns? Focus on “key” risks.
• How much of each risk type will you take on? Is your level of risk appropriate given your return goals (risk appetite)? Do you have sufficient capital and liquidity to support these risks?
ERM RISK COMPONENTS
REGULATORY RISK CATEGORIES

NCUA Risk Categories
- Credit Risk
- Interest Rate Risk
- Liquidity Risk
- Transaction Risk
- Compliance Risk
- Strategic Risk
- Reputation Risk

Fed Risk Categories
- Credit Risk
- Market Risk
- Liquidity Risk
- Operational Risk
- Legal Risk
- Reputational Risk

FHLB Risk Categories
- Credit Risk
- Market Risk
- Liquidity Risk
- Operational Risk
- Business Risk
REGULATORY CAPITAL RULES HAVE CREATED A FRAMEWORK FOR CLASSIFICATION OF RISK TYPES

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Definition</th>
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<tr>
<td>Credit Risk</td>
<td>Loss due to a borrower's inability to meet its financial obligations</td>
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<tr>
<td></td>
<td>Loss due to change in borrower's credit quality</td>
</tr>
<tr>
<td>Market Risk</td>
<td>Loss due to change in market value of traded positions</td>
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<tr>
<td></td>
<td>Loss due to impact of changes in cost to close accrual positions (primarily interest rate risk)</td>
</tr>
<tr>
<td>Operational Risk</td>
<td>Loss resulting from inadequate or failed internal process, people and systems, or from external events. The definition includes legal risk. The definition does not include strategic or reputational risks.</td>
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</table>
Many institutions have adopted these definitions for a functional ERM structure.

**Enterprise Risk Management Functional Structure (Not Organizational Structure)**

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<tr>
<th>Credit Risk</th>
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<th>Operational Risk</th>
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<td>Change in Fair Value</td>
<td>Compliance Risk</td>
</tr>
<tr>
<td>Retail</td>
<td>Interest Rate Risk</td>
<td>Int. and Ext. Fraud</td>
</tr>
<tr>
<td>Counterparty</td>
<td>Currency Risk</td>
<td>Business Process Failure</td>
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<tr>
<td></td>
<td>Liquidity Risk</td>
<td>HR</td>
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<td></td>
<td></td>
<td>Litigation</td>
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<td></td>
<td></td>
<td>Data Security</td>
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<tr>
<td></td>
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<td>Technology/Systems</td>
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<td>Natural Disaster</td>
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<td></td>
<td></td>
<td>Etc.</td>
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Other Risk Category Possibilities: Business, Strategic, Concentrations, Reputation, etc.
ERM IMPLEMENTATION PHASE 2- IMPLEMENTING THE PLAN
BUILDING YOUR ERM ROADMAP/IMPLEMENTATION PLAN: STEP #2 – IMPLEMENTING

A. Identify and prioritize the RISKS
   - Keep it to the “TOP 5” for in-depth Board reporting
   - Additional risks can be identified and listed, but don’t take away the focus from the Top 5

B. Simultaneously adopt a preliminary risk framework and conceptualize simple reporting

C. Identify gaps in the process and start to analyze (but don’t let them slow you down!)
ERM IMPLEMENTATION – THINK ABOUT “RISK AWARENESS”

Difficult process – 3 levels of risk awareness

- **Known** – You lend money to various parties and someone isn’t going to pay (credit risk)
- **Unknown, but knowable** – e.g., flood or other natural disaster that isn’t unusual for the area.
- **Unknown, unknowable** – would not ever know in advance, but is there a plan I can have if “something” takes me out of what I do?

This helps you to think beyond the everyday risks.
ERM IMPLEMENTATION – RISK ASSESSMENT

Ask each Board member:

“With our credit union’s business model in mind, what are the Top 5 emerging risks:”

1. ___________________________________________
2. ___________________________________________
3. ___________________________________________
4. ___________________________________________
5. ___________________________________________

Ask Management the same question. Will the results be similar?

How often does the Board and Senior Management engage in explicit discussions about risk?

Reminder: Addressing risk in an advanced ERM process becomes strategic instead of defensive
RISK ASSESSMENT (CONTINUED)…

- For identified risk events:
  - What is the time frame to consider?
  - How likely is the event to occur?
  - What would be the impact?
    - On financial goals (cash flow, capital, reported earnings)
    - On operational goals
    - On reputation/brand
  - Inherent vs. residual risks?
ONE COMPLICATION: INHERENT VS. RESIDUAL RISK

• What risks are we assessing?
  – **Inherent risk**: Risk to an entity in the absence of any actions management might take to alter either the risk’s likelihood or impact
  – **Residual Risk**: Risk that remains after management responds to the risk identified

Back to some risk assessment examples....
ABC INSTITUTION
SIMPLE ENTERPRISE RISK ASSESSMENT EXAMPLE (RISKS EXAMPLE #4).

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RISK MANAGEMENT CONTINUUM

**Reactive**
- Lack of Board or senior management emphasis on risk
- No common risk lingo
- Stove-pipe risk management
- Ad hoc approach

**Aware**
- Some board and senior management support
- Risk leader identified
- Periodic risk profiling
- Key risks defined in common vocabulary
- Recognized need for ERM

**Strategic**
- Proactive board and senior management involvement
- Risk managed and assessed across entire organization
- Common language and approach used and understood
- Real-time analysis of risk portfolio (real-time KRIs)
- Recognized need for ERM

Most companies straddle the Continuum.

Goal
RISK ASSESSMENT CYCLE

- Identify risk & controls
- Assess exposures and control effectiveness
- Determine corrective action(s)
- Test Controls
- Management Certification
- Board of Directors

*Risks are reassessed & ratings are updated

*Shows a snapshot of the pulse of enterprise risk management at a-glance

*Track Project & Task priority, status, due dates, hours

*Record testing scope, conclusion and recommendation(s)
ASSESSED RISK REPORTING: RISK MAPPING

- Heat Maps are a valuable tool for communicating/reporting risks
  - Chart both likelihood/probability and severity/impact
HEAT MAP PORTRAYAL OF **INHERENT RISKS**

**Risk Event:**
1. -----  
2. -----  
3. -----  
4. -----  
5. -----  

**Impact (Severity):**
- 9
- 10
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

**Likelihood (Probability of Occurrence):**
- 9
- 2
d
- 4
- 1
- 3
- 7
- 8

**Mitigation Risk:**
- Not Mitigated
- Marginal Mitigation
- Sufficient/Acceptable
ERM IMPLEMENTATION PHASE 3 - REFINING
BUILDING YOUR ERM ROADMAP/IMPLEMENTATION PLAN: STEP #3 – REFINING

A. Define the Credit Union’s “Risk Appetite”
   - Quantifying risk
   - Determine Key Risk Indicators (KRI)

B. Monitoring and Reporting
   - What will reporting to executive management and the Board look like going forward?
   - Ongoing monitoring of implementation progress with board-level accountability
   - Benchmark vs. industry leaders in this area as well as peers
ELEMENTS OF RISK APPETITE

**Existing Risk Profile**
The existing level and distribution of risks across risk categories (e.g. financial risk, market risk, operational risk, reputation risk, etc.

**Risk Capacity**
The Maximum risk a firm may bear and remain solvent

**Risk Tolerance**
Acceptable levels of variations an entity is willing to accept around specific objectives

**Desired Level of Risk**
What is the Desired risk / return level

**Determination of Risk Appetite**
(the amount of risk an entity is willing to accept in the pursuit of value)
WAYS TO DEFINE RISK APPETITE

| Quantitative                      | Clearly defined measure  
|                                 | Can be cascaded to business units  
|                                 | For example, loss of capital or degree of volatility in earnings  
| Qualitative                      | Not all risks can be accurately/credibly measured  
|                                 | For example, risk of damage to reputation  
| Zero Tolerance                   | A subset which can be very clearly defined  
|                                 | For example, loss of life or violation of laws  

SOME EXAMPLES OF EXTERNAL KEY RISK INDICATORS

Industry and Competitor Trends
- Number of Competitors
- New product or service announcements
- Pricing Trends
- Risk events realized by competitors
- Shifts in customer tastes/trends

Economic Trends
- Unemployment forecasts
- Consumer spending trends
- Trade and foreign policy

Liquidity/Capital Markets
- Interest rate trends/forecasts
- Credit spreads in debt and credit markets
- Stock market trends and forecasts

Supply Chain Issues
- Financial health of suppliers
- Risk events at suppliers
- Pricing trends

Regulatory Changes
- Anticipated changes in tax policy
- New regulations/restrictions
- Changes in key political offices
### SOME EXAMPLES OF INTERNAL KEY RISK INDICATORS

<table>
<thead>
<tr>
<th><strong>Business Operations</strong></th>
<th><strong>Information Technology</strong></th>
<th><strong>Compliance</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactions, output</td>
<td>Disasters, outages, disruption</td>
<td>State of controls</td>
</tr>
<tr>
<td>Sales volume, failed deals</td>
<td>Help desk metrics</td>
<td>Regulatory inquiries/investigations</td>
</tr>
<tr>
<td>Operational performance issues</td>
<td>Security metrics</td>
<td>Litigation cases</td>
</tr>
<tr>
<td>Supply chain/logistics</td>
<td>Project metrics</td>
<td>Discovery requests</td>
</tr>
<tr>
<td></td>
<td>IT incidents/investigations, complaints</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IT audit issues</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Human Resources</strong></th>
<th><strong>Accounting/Finance</strong></th>
<th><strong>Audit</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover</td>
<td>Adjustments</td>
<td>High-risk issues/material weak.</td>
</tr>
<tr>
<td>Headcount</td>
<td>Unsubstantiated balances</td>
<td>Past-due audit issues</td>
</tr>
<tr>
<td>Corporate training: policies, procedures, ethics</td>
<td>Missed deadlines</td>
<td></td>
</tr>
<tr>
<td>Vacancies</td>
<td>Write-offs</td>
<td></td>
</tr>
<tr>
<td>Sick days</td>
<td></td>
<td></td>
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<tr>
<td>Disciplinary actions</td>
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</tbody>
</table>
KEY RISK INDICATORS GUIDANCE FOR DEVELOPING YOUR ERM DASHBOARD (THE METRIC/DATA IS…)

- Based on established practices or benchmarks
- Developed consistently across the organization
- Provide an unambiguous and intuitive view of the highlighted risk
- Allow for measurable comparisons across time and business units
- Provide opportunities to access the performance of risk owners on a timely basis
- Consumes resources efficiently (not overly burdensome to get the info)
ERM – STRENGTHENING FOCUS ON STRATEGIC RISK EXPOSURES

- Risk Metrics?
- Risk Drivers
- Increased Loan Yield (Rate & Volume)
- Non-interest Income Products
- Reduce Head Count
- Other Cost Savings Measures – Vendor Mgmt.
- Increased Revenues
- Expense Savings
- Profitability
CREATE AN IDEAL ROSTER OF RISK REPORTS

EXAMPLES:

• A high-level summary of the top risks for the enterprise as a whole; broken down by operating unit, geographic locations, product group, etc., along with significant gaps in risk management capabilities

• Report of emerging issues or risks that warrant immediate attention

• Summary of risk events, e.g., significant exceptions versus policies or established limits

• Summary of significant changes in key variables beyond management’s control (e.g. interest rates, exchange rates, etc.) and the effect on earnings, cash flows, capital, and the business plan.

• Summary of the status of improvement initiatives
# RISK REPORT EXAMPLE (KRI REPORT)

<table>
<thead>
<tr>
<th>Target Key</th>
<th>Better Than expected</th>
<th>Expected</th>
<th>Worse Than Expected</th>
<th>N/A</th>
</tr>
</thead>
</table>

## Human Resources

<table>
<thead>
<tr>
<th>1st qtr</th>
<th>2nd qtr</th>
<th>3rd qtr</th>
<th>4th qtr</th>
<th>YTD</th>
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<tbody>
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</table>

- Average Daily Census
- Assets per FTE
- etc.
- etc.

## Credit Quality

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</tbody>
</table>

- Past due over 30 days
- Past due over 60 days
- Past due over 90 days
- Over 90 days and accruing
- ALLL/Loans
- Net charge-off %, annualized
- TDR's/Loans
- etc.
- etc.
- etc.
- etc.

## Financial

<table>
<thead>
<tr>
<th>1st qtr</th>
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</tbody>
</table>

- Net Interest Margin
- ROA
- ROE
- Efficiency Ratio
- Tangible Book Value
- N/A etc.
- N/A etc.
- etc.
- etc.
- etc.
- etc.
- etc.
- etc.
- etc.
- etc.
- etc.
- etc.
- etc.
- etc.
ROLE OF INTERNAL AUDITOR IN REGARD TO ERM
INTERNAL AUDITING ROLES IN REGARD TO ERM

- Giving assurance on risk management processes
- Giving assurance that risks are correctly evaluated
- Evaluating risk management processes
- Evaluating the reporting of key risks
- Reviewing the management of key risks
- Facilitating identification and evaluation of risks
- Coordinating ERM activities
- Consolidating the reporting on risks
- Maintaining and developing ERM framework
ROLES INTERNAL AUDITING SHOULD NOT UNDERTAKE

• Setting the risk appetite
• Imposing risk management processes
• Management assurance of risks
• Taking decisions on risk responses
• Implementing risk responses on management’s behalf
• Accountability for risk management
IN SUMMARY...
NO ERM AT YOUR CREDIT UNION?

• It’s happening already  
  ...this is the business of banking

• Start simply  
  ...joint Board/Committee and Management adventure

• Focus on Business and Regulators  
  ...how to use it to improve processes and performance  
  ...a continuous improvement perspective
GREAT DUMB QUESTIONS

• What happens if...?
• Seems like that market is...could that impact us?
• I heard about...do we have risk exposure here?
• Does our policy explain what to do if...?
• Who is responsible for making sure we don’t...?
• Do we have a limit on...
• What does our strategic plan say about...
• Do you think senior management knows how the Board feels about that risk?
• Are there any other Board members who didn’t understand that; I’m not clear about...
• Has anyone around here read the COSO template for risk management?
RECOMMENDATIONS FOR ERM

- Develop ERM Policy
  - Define Risk categories, roles, Measure, monitor, and reports

- Develop ERM Committee Charter
  - Define members, roles, scope, reporting relationship to other committees

- Publish ERM Board Packet
  - Key risk indicators (KRI) dashboard
  - ALCO, Credit, Compliance, Operational Risk summaries