VALUE CREATION USING ERM

PRESENTED BY KRISTINA NARVAEZ, MBA
PRESIDENT OF ERM STRATEGIES, LLC

ENTERPRISE RISK MANAGEMENT

- **Enterprise Risk Management** improves an organization’s strategic decision making by addressing threats and opportunities in a way that integrates risk management with the strategic planning process

- ERM program requires an organization to identify their risks, qualify and quantify their risks, analyze the interrelationships of their risks, monitor their risk exposures and evaluate how their ERM program aligns with their strategic plans.

TRADITIONAL VS. ERM

Traditional Risk Management

- Focus on hazard and operational risks
- Goal is to reduce potential claims to the organization

Enterprise Risk Management

- Focus on global array of risks:
  - Strategic
  - Operational
  - Financial
  - Compliance
  - Hazard
  - Human Capital
  - Technology

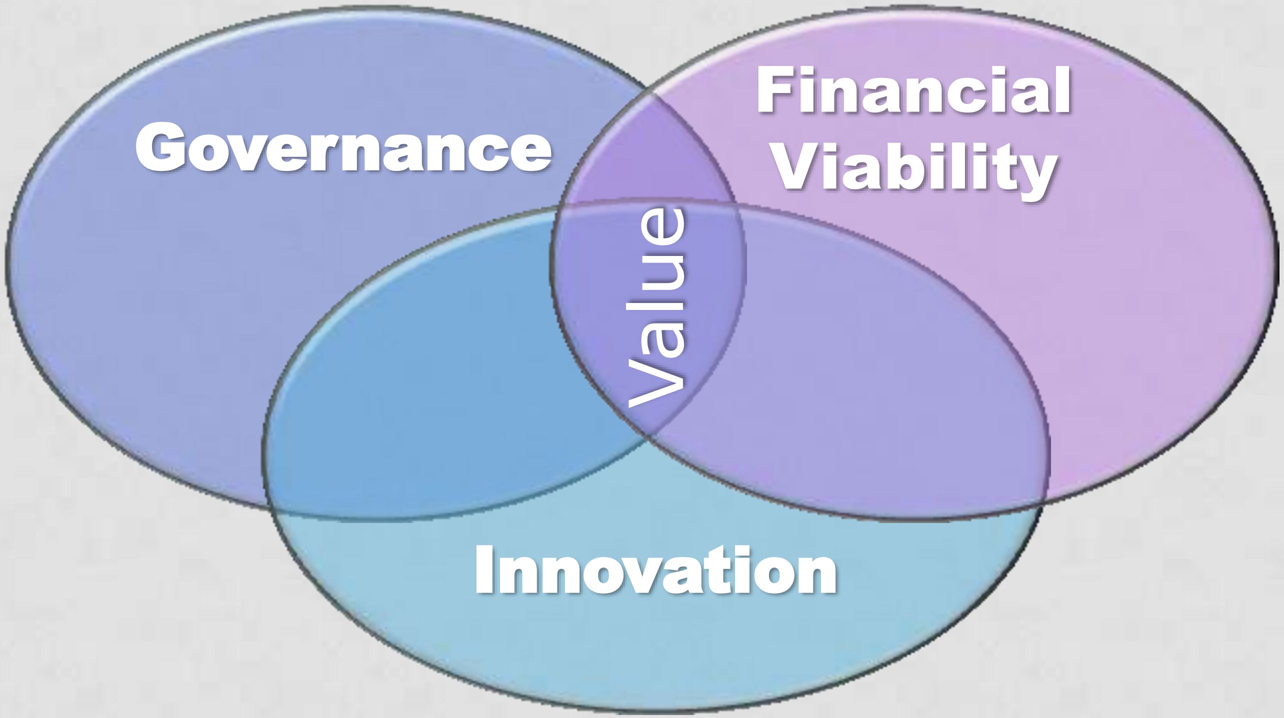
BENEFITS OF ERM

- Enhance decision making
- Increase profitability
- Reduce Volatility
- Improve ability to meet strategic goals
- Increase management accountability
- Breaking down silos-seeing risk from a holistic approach
- Develop business continuity

RISK OPTIMIZATION

- The balance of risk and reward- greater risk taking should equal a greater reward and less risk taking would have a lesser reward
- Thoroughly explore both the upside and downside outcomes of top risks
- What is the best use of the organization's resources to control their risks

CREATING VALUE FROM ERM



SIX STEP APPROACH TO ERM

- Risk Identification
- Risk Assessment
- Risk Analysis
- Implementation
- Monitoring
- Evaluations

RISK IDENTIFICATION

Risk Identification - Taking inventory of all risks in the organization and tying them to the organization's strategic plan.

Risk Culture- First step in risk identification is meeting with the senior management and define the organization's risk appetite and risk tolerance level

RISK APPETITE AND RISK TOLERANCE

- **Risk Appetite**- Requires a company to consider what its overarching attitude is to risk taking and how this attitude relates to the expectations of its shareholders

- **Risk Tolerance**- Requires a company to consider in quantitative terms exactly how much of its capital it is prepared to put at risk

EXAMPLE OF RISK IDENTIFICATION

- **Dallas/ Fort Worth International Airport's** Risk Categories:

- Financial
- Human Capital
- Legal/ Regulatory
- Operational
- Strategic
- Reputational
- Technology

FINANCIAL RISKS AT DALLAS/ FORT WORTH INTERNATIONAL AIRPORT

Financial Risks:

- Debt management
- Decline in air travel
- Economic downturn
- Fuel price volatility
- Investment management process
- Revenue concentration

RISK ASSESSMENT

Risk Assessment- is where we determine the cause, risk event, and impact of all risk exposures and then quantify those risks with a risk rating.

TARGET RISK RATING (Risk rating expected / predicted once all mitigations are in place.)				CURRENT RISK RATING (Current level of risk in light of mitigations implemented at this report period.)				RISK TOLERANCE RATING (Maximum level of risk executive is willing to accept. This should be provided by executive after having been briefed on the risk, existing and planned mitigations, and associated costs)			
LIKELIHOOD (1-5)	CONSEQUENCE (1-5)	TOTAL SCORE (1-25)	RISK RATING	LIKELIHOOD (1-5)	CONSEQUENCE (1-5)	TOTAL SCORE (1-25)	RISK RATING	LIKELIHOOD (1-5)	CONSEQUENCE (1-5)	TOTAL SCORE (1-25)	RISK RATING

BRITISH COLUMBIA USING RISK ASSESSMENT FOR 2010 WINTER OLYMPICS

- British Columbia used a risk register to track risk events, causes of a risk event, and the risk event's impact to the organization:

- **Risk events**- are occurrences that stand in the way of meeting a goal. For example, a risk event could be failure to maintain normal delivery of services

BRITISH COLUMBIA USING RISK ASSESSMENT IN THE 2010 WINTER OLYMPICS

- **Causes**- are triggers to an event. These are situations or circumstances that could increase the likelihood of risk event occurring. For example, transportation gridlock or changes to transit routes during the Olympics could prevent staff from accessing their work sites, resulting in reduced service delivery

- **Impacts**- are any unintended consequences of the event occurring

KEY PERFORMANCE INDICATOR

- **Key Performance Indicator** –is a nonfinancial leading indicator of business performance

- KPI are used to identify critical business processes and supporting applications and **musty be measurable**

USING KEY PERFORMANCE INDICATORS AT MARS

Drive core brands in Snack Achieve growth targets by focusing on building the core brands.	**Drive core brands in Snack** Achieve growth targets **(5%)** by focusing on building the core brands.
Grow Dry Dog Achieve share gain for Dry Dog	**Grow Dry Dog** Achieve **2%** share gain for Dry Dog
Sustain Snacks and Treats Maintain market leadership while achieving growth and profitability targets	**Sustain Snacks and Treats** Maintain market **share of at least 35%** while achieving **growth (4%) and profitability (8%) targets**

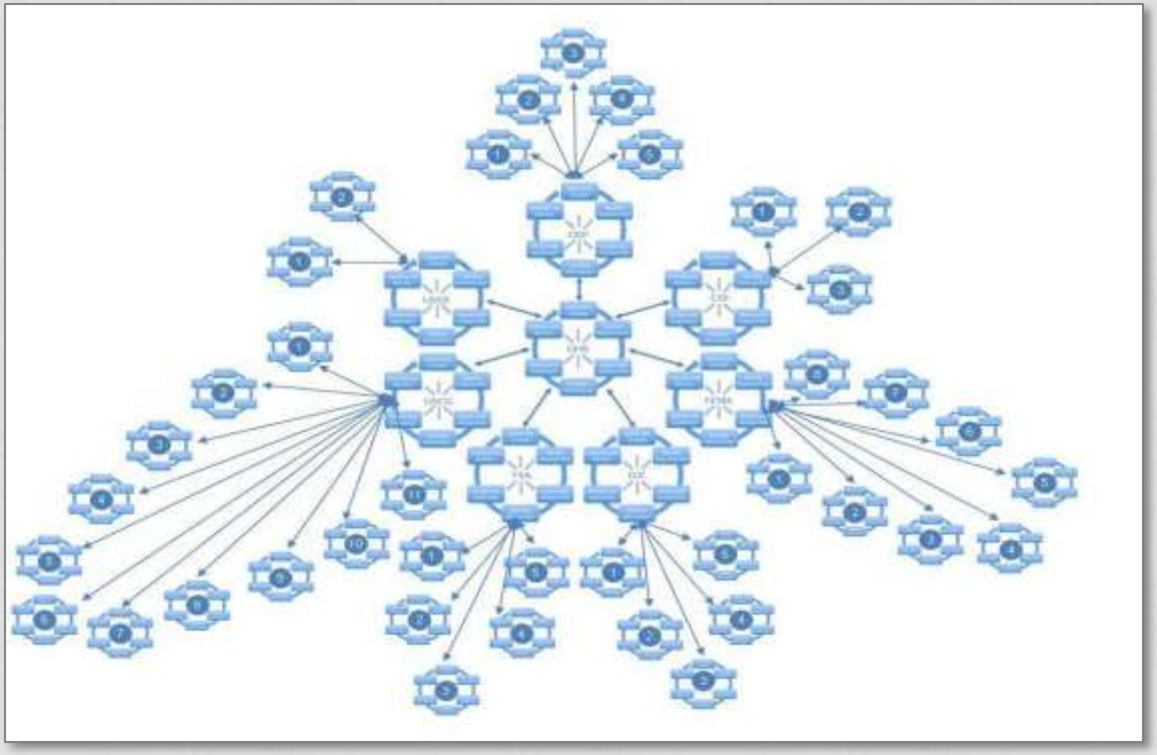
KEY RISK INDICATOR

- **Key Risk Indicator-** is a leading indicator of risk to business performance

- Examples of key risk indicators-
  - % of suppliers with no business continuity management
  - % of mission-critical recovery plans not exercised with the last 12 months
  - % turnover of mission-critical IT personnel
  - % of mission –critical business processes with a backup/recovery architecture

RISK ANALYSIS

Risk Analysis examines the interrelationship of risks both within and outside the organization.



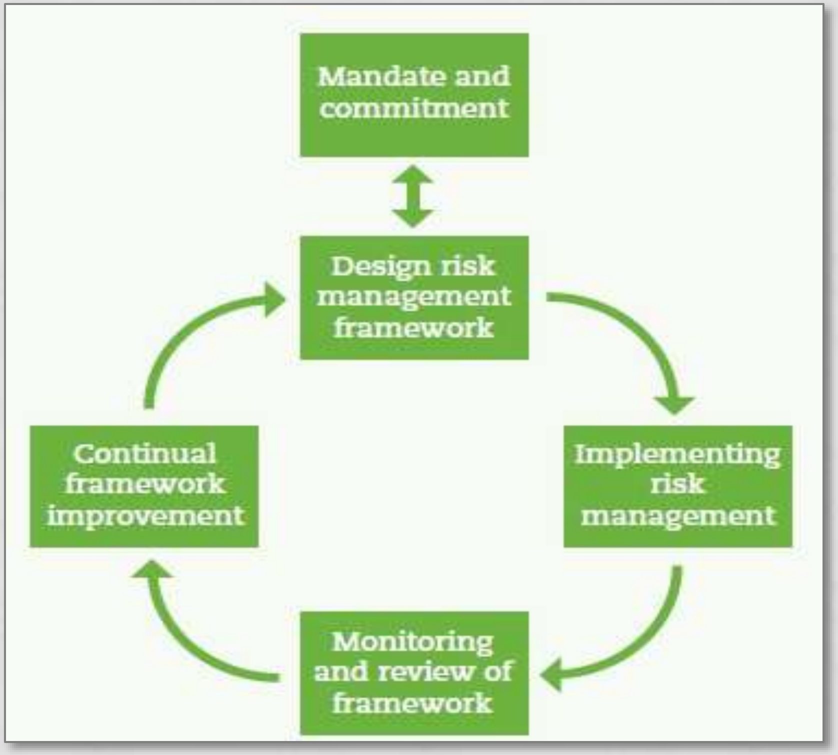
DEPARTMENT OF HOMELAND SECURITY USES IRM

- **Integrated Risk Management** is the integration of the management of risk at each level of management into all business and strategic planning and decision making processes.

Providing mechanisms to share risk data, risk assessment, and risk management decision support and analysis tools across the homeland security enterprise

IMPLEMENTING ERM

- **Implementation** of ERM includes structure, practices and strategies to be used.



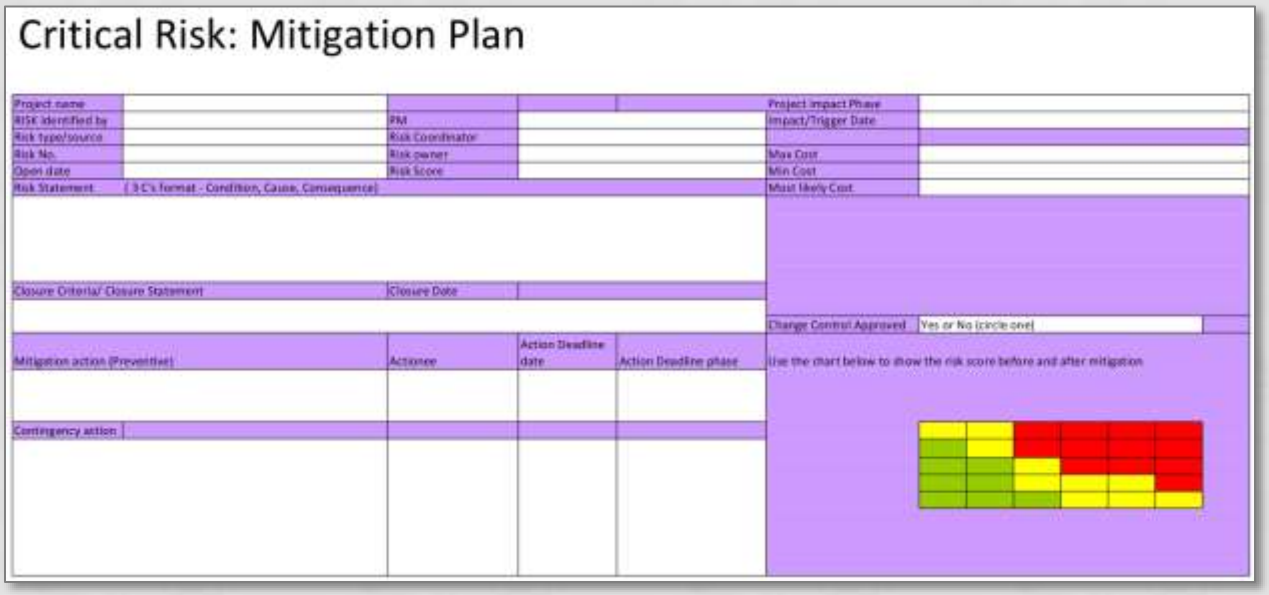
ERM FRAMEWORKS & STANDARDS

ERM Frameworks

- ISO 31000 (2009)
- COSO II (2004)
- British Standards Institute (2008)
- Australian/ New Zealand (2004)
- Federation of European Risk Management Association
- Basel III
- Solvency III

MONITORING

Monitoring is the tracking of risk information from the ERM program.



Critical Risk: Mitigation Plan

Project name					Project impact Phase	
RISK identified by		PM			Impact/Trigger Date	
Risk type/source		Risk Coordinator				
Risk No.		Risk owner			Max Cost	
Open date		Risk Score			Min Cost	
Risk Statement	(3 C's format - Condition, Cause, Consequence)				Most likely Cost	
Closure Criteria/ Closure Statement		Closure Date				
					Change Control Approved	Yes or No (circle one)
Mitigation action (Preventive)		Actionee	Action Deadline date	Action Deadline phase	Use the chart below to show the risk score before and after mitigation	
Contingency action						

MASS DEVELOPMENT USES A CRITICAL RISK MITIGATION PLAN

- MassDevelopment uses their critical risk mitigation plan to help them identify the owner of a particular risk and be able to track the progress of their risk controls.

- For example, the risk management team at MassDevelopment use their Critical Risk Mitigation Plan to identify safety concerns in their construction projects

EVALUATION

Evaluation involves ascertaining the strengths and weaknesses of the ERM program with regard to the organization's strategic goals.

UNIVERSITY OF CALIFORNIA REDUCES COST OF RISK

- Each year University of California holds an Annual ERM Summit focused on their continuous effort in improving their ERM program by reducing their Cost of Risk.

- Since 2003-2004 fiscal year, they have reduced Cost of Risk by $ 493 million dollars

- Reduced the Cost of Risk from $18.46 per $1,000 of operating budget to $13.31 per $1,000 of operating budget