Best Practices in Enabling Enterprise Risk Management

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Overview

- What’s driving interest in ERM
- Concept of an ERM infrastructure
- Barriers to effective ERM
- Components of a ‘best practices’ ERM infrastructure
- Interesting ERM case studies throughout
Scope: What is ERM and what is driving it?

- Minimum Capital Requirements and Liquidity Covenants
- Supervisory Review of Internal Controls & Capital Adequacy
- Public Disclosure of Risk Management by Companies
- Validation of accuracy and integrity of financial management
- CEOs and CFOs must personally certify that their companies' statements are complete and accurate

RISK Management

- Market
- Credit
- Operational
Who Cares?

CIO’s Care:
- CIOs are faced with both sides of the business; needs for growth and expansion and cost justification for each IT project.
- Institutions are spending Millions each year on IT but feel they have reached the limits that enable them to contain costs yet enable large-scale acquisitions.

CFOs Care:
- In the post Sarbanes-Oxley environment where CFOs are asked to sign off on financial statements, the quality of data and the systems that produce that data are being scrutinized now more than ever before.
- Growth can only come with efficient architectures and synergistic investments in technology.

CRO’s Care:
- Risk compliance in financial institutions has become more complicated by a number of regulations such as Basel II accord and USA Patriot act.
- A siloed approach to compliance is no longer valid, significant savings can be found in the pooling of initiatives around risk.

CMOs Care:
- In an environment where CMOs are being asked to grow revenues with less manpower than ever before, new regulations are getting in their way of being effective.
- Privacy policies, and opt out policies are destroying pre existing databases and making it hard to cross sell and up sell existing customers.
- Quality data can only be found by drawing data from a centralized data warehouse that contain every interaction with the customer as well as when and where it is appropriate to contact them.
Themes in developing a robust ERM infrastructure

- Alignment of people, processes, and strategic vision
- Integrated technology enables effective ERM
- Mandatory alignment of businesses with corporate vision
- Cooperation across business silos
- Rewards for risk-adjusted performance

Alignment
Convergence

- Strategy
- People
- Processes

Technology as enabler
Some Barriers to Successful ERM

Organizational Silos
- Internal politics
- Tunnel vision
- Lack of synergies
- Conflicting strategies

Inadequate Data Management Strategy
- Fragmented data
- Incomplete data
- No common data models
- Manual aggregation of data

Corporate Culture
- Overhyped benefits of ERP
- ERM is ‘catastrophe avoidance’
- Risk management is overly complex
- Executive compensation structure not geared towards ERM
Evolution of the Enterprise Risk Management Infrastructure

Stage 1
Business & Risk Mgtm Silos

Stage 2
Partial Integration

Stage 3
Holistic Approach

Stage 4
Continuous Realignment of Policies and Strategies with Ever-Changing Business & Compliance Realities

Stage 5
Innovation & Competitive Advantage: Effective ERM is Value-Added Business, which translates to higher shareholder returns

Trust [Enterprise Risk Reduction] → Increasing
Efficiency → Increasing
Return → Increasing

Increasing

Increasing

Increasing
Our Objective: Propose a Strategy to Enable ERM

Enterprise Risk Strategy and Corporate Governance

Executive sponsorship  Corporate governance  Top-down definition of risk appetite
Strategic allocation of capital  Policies and procedures  Integration across silos

Business Processes
- Increasing complexity of business model has increased risk of non-compliance to policies and procedures. This has created a need for additional internal controls or even a completely new business model.
- Manual work around and re-keying of data increase potential for human error or fraudulent behaviour
- Increasing potential for failure to comply with regulatory requirements due to lack of sufficient assistance from the commonly used application systems
- Profiles of new products are increasingly changing the fundamental risk profiles of customers and need additional processes and controls
- Absence of key risk and key performance indicators

People and Organization
- Increasing need for higher skilled professionals
- Not enough people
- Increasing turnover and declining tenure trends add to costs and risks
- Human errors can lead to increased chances for poor delivery of service, damaging customer relationships & increasing risk
- Potential for compensation not sufficiently matched with skill set and market

Technology
- Fragmented and disparate technology platforms need to be better integrated
- Relatively low investments in technology planning & procurement have weakened the ability to scale up operations, monitor and control risks
- Weaknesses in existing systematic / detective controls to manage operational risks
- Technology functionality delivered is less than optimal and there are many more opportunities for automation
- A certain amount of instability in the existing technology platforms leads to frustrations and lost productivity
- Deficiency in the amount of trust placed in existing systems and applications.
- Significant opportunity exists to implement key early warning systems and reduce risk while improving decision-making
- Weaknesses in standardized reporting of management information
- Inconsistent risk measurement models and tools
- Limited early warning systems
- Limit setting tools
- Loss classification frameworks
- RAROC and VaR models
An Enterprise Risk Infrastructure is composed of several layers

A enterprise risk infrastructure gives an organization the ability to examine all of the layers within it. The result is a core that strengthens internal controls and efficiently and reliably manages risk exposures.
Measuring business unit risk is the outer most layer

**Business Unit Risk Management**

- Avoid unexpected losses
- Stay out of the news
- Improve bottom line
- Reduce Fines
- Increase Customer Satisfaction
- Increase Employee Utilization
Measuring enterprise risk is the next layer in the journey

Enterprise Risk Exposure Management

- Roll together multiple BUs
- Risk exposure aggregation
- Information sharing
  - Leverage on more comprehensive views
  - Ability to report to the BoD and Auditors with greater clarity and depth on compliance matters, risk exposures, and effectiveness of controls
Risk-based metrics deliver a sustainable change in everyday business behavior.

Risk-based metrics
- Optimal risk/return profile
- Balances risk and rewards
- Improve return/risk ratio on capital or assets
- Facilitates risk-based performance measurement and assessment
- Ability to fully document and effectively disclose risk-based performance
ERM must be backed by the right governance models to be effective

- Strategic IT leadership
- Enterprise perspective
- Scale economies
- Control of standards
- Critical mass of skills
- Synergies

Characteristics of ERM options
- Users control Tactical priorities
- Business unit’s have ownership
- Responsive to business unit’s needs
- Excessive overall cost to group
- Variable standards of risk competence
- Redundant efforts & duplicate work
- No synergy

Centralized
- Unresponsive
- No business unit ownership of systems
- No business unit control of central overhead costs
- Doesn’t meet every business unit’s needs

Federated ERM Model

Decentralized
ERM Technology Infrastructure

ERM Infrastructure

**Data**
- Data Warehousing
  - ETL
  - Data quality
  - Aggregation

**Analytics**
- Predictive analytics
  - Statistics
  - Forecasting
  - Scenarios / stress tests
  - Measure uncertainty
  - Go beyond querying

**Deployment**
- Web Services
  - Services Oriented Architecture
  - Portals and Portlets
  - Dashboards

**Integrated Data Model**
Conclusion

A ‘best practices’ ERM infrastructure:

- Embodies a philosophy
  - Alignment
  - Convergence
- Contains key components
  - Well-defined business processes
  - Robust technology infrastructure
- Allows appropriate flexibility
  - BUs can run their business effectively
  - Federated model
- Becomes integral to the corporate culture
  - ERM is everyone’s responsibility
  - Cultural change begins at the top