

# Metricon 4 The “Ugly, The Bad, The Good”

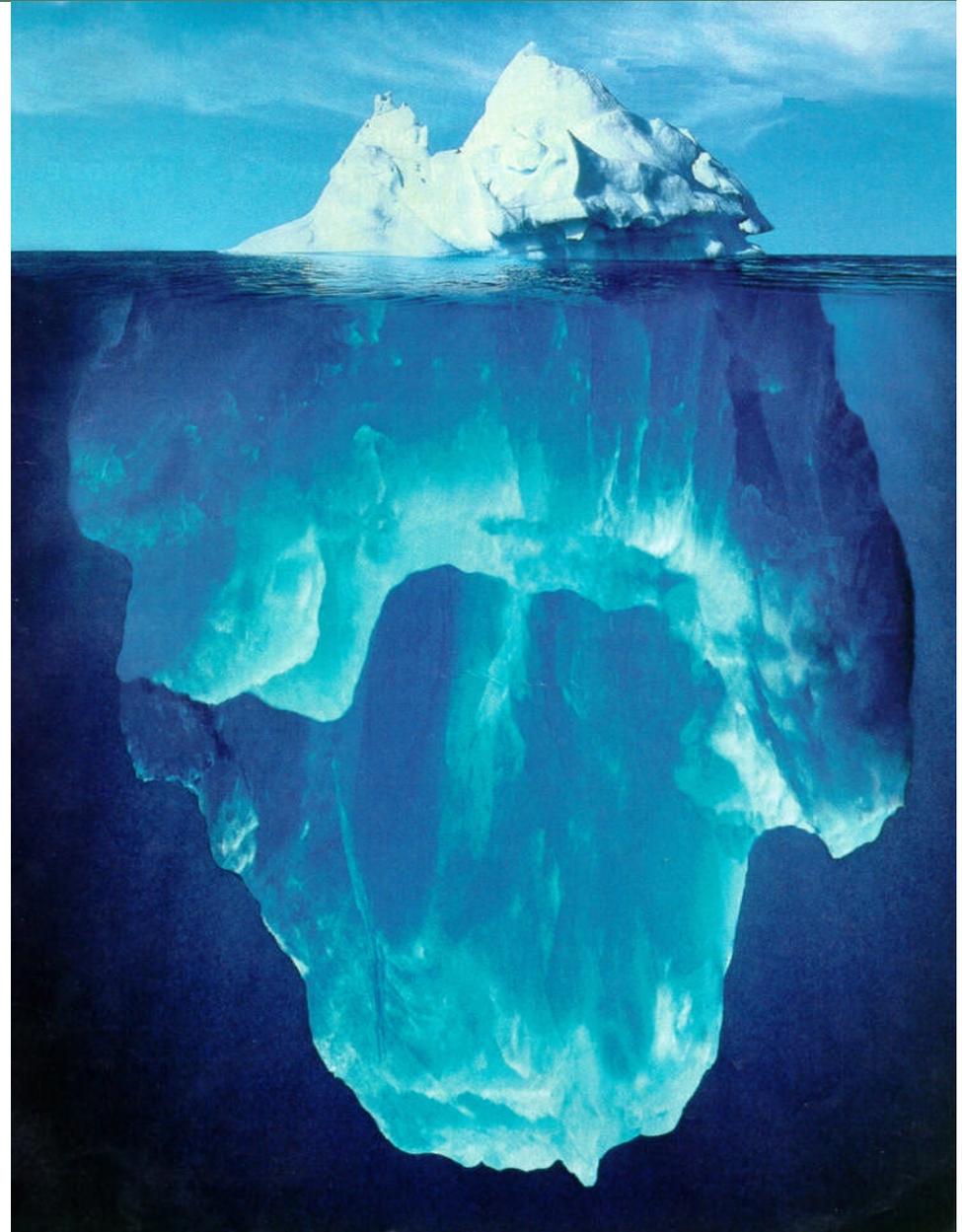
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Lloyd Ellam  
Vice President  
Risk Science and Innovation

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- Security as Risk
- SigmaRisk Perspective
- Value of Security
- Industry Observations





**Lloyd Ellam**  
**Vice President, Risk Science and Innovation**

**Experience**

- Cyber risk assessment and control specialist
- Team Leader for secure semiconductor solution and first successful chipset
- Experienced in many mixed technology processes and test methodologies
- Team Leader for high speed and secure data collection satellite and ground-based systems. Developed verification and control system for seismic monitoring and control
- Engineering and service leader for “mission critical” computer control systems for a global computer supplier. Developed modeling, simulation, and training for “hard down” utility controls
- NATO and NORAD line officer specializing in Electronic Warfare. Crisis control training in nuclear, chemical, and biological disasters. Liaison to civilian authorities on national and international infrastructure

**Education**

- Bsc.Eng., The Royal Military College
- MSc (Physics) Strathclyde

*“SigmaRisks is an Enterprise Risk Management services company.”*

- The mission of SigmaRisks is to deliver highly valuable enterprise risk management professional services to large enterprise and government customers.
- SigmaRisks uses a combination of proprietary and industry standard practices to:
  - Identify
  - Quantify
  - Mitigate and
  - Transfer risk.

- Expand on previous presentation area to show examples of business value of security. Yes this is the back up presentation.
- Technology for quantification of complex scenarios based on the Precautionary Principle.
- Review three examples of client scenarios where security ranged from non-existent to a true business enabler.

## | Good Enough Security

- You have heard this from Dan before
- Good Enough is Good Enough
- Good Enough always beats perfect
- The difficult part is determining what is good enough

# | What is Security?

- Security is a “State”.
  - As a “state” Security is most often an intangible asset.
  - However Security is an asset and can be valued.
  
- Security as a “State” is obtained by integrating to the enterprise.
  - Best Practices
  - Technology Solutions
  - Human Factor Interactions
    - Cultural Myopia

## | What Security is Not

- Security is not Static. By definition therefore it must be Dynamic.
- Static solutions to a Dynamic problem will fail.
- There is no Silver Bullet.
- One Size Doesn't fit all.

- SigmaRisks delivers ERM services around the four key pillars of business risk:
  - Strategic
  - Financial
  - Hazards
  - Operational

## Identify

- Enterprise threat/risk assessments
- Program/project threat/risk assessments
- Scenario facilitation
- Compliance assessments to a variety of policies, standards and regulations
- Privacy impact assessments
- Risk mapping and prioritization

## Quantify

- Risk Modelling
- Digital asset valuation
- Process valuation
- Financial model development
- Prioritized risk mapping
- Scenario facilitation

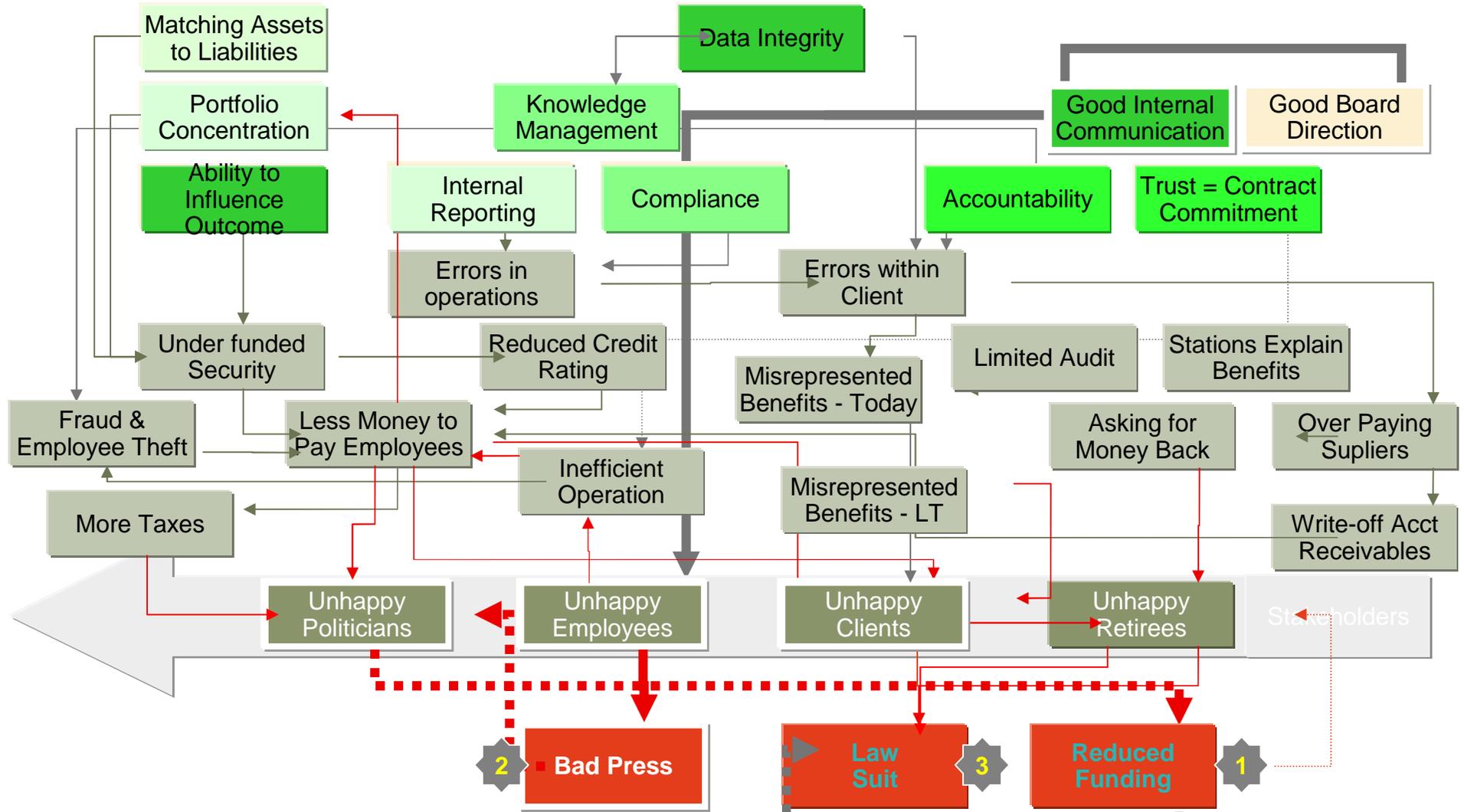
## Mitigate

- Crisis management consulting
- Business recovery planning
- Disaster recovery planning
- Risk operations and monitoring solutions
- Service level agreements
- Identity and access consulting and systems integration
- Security event management systems
- Integration of security and compliance tools

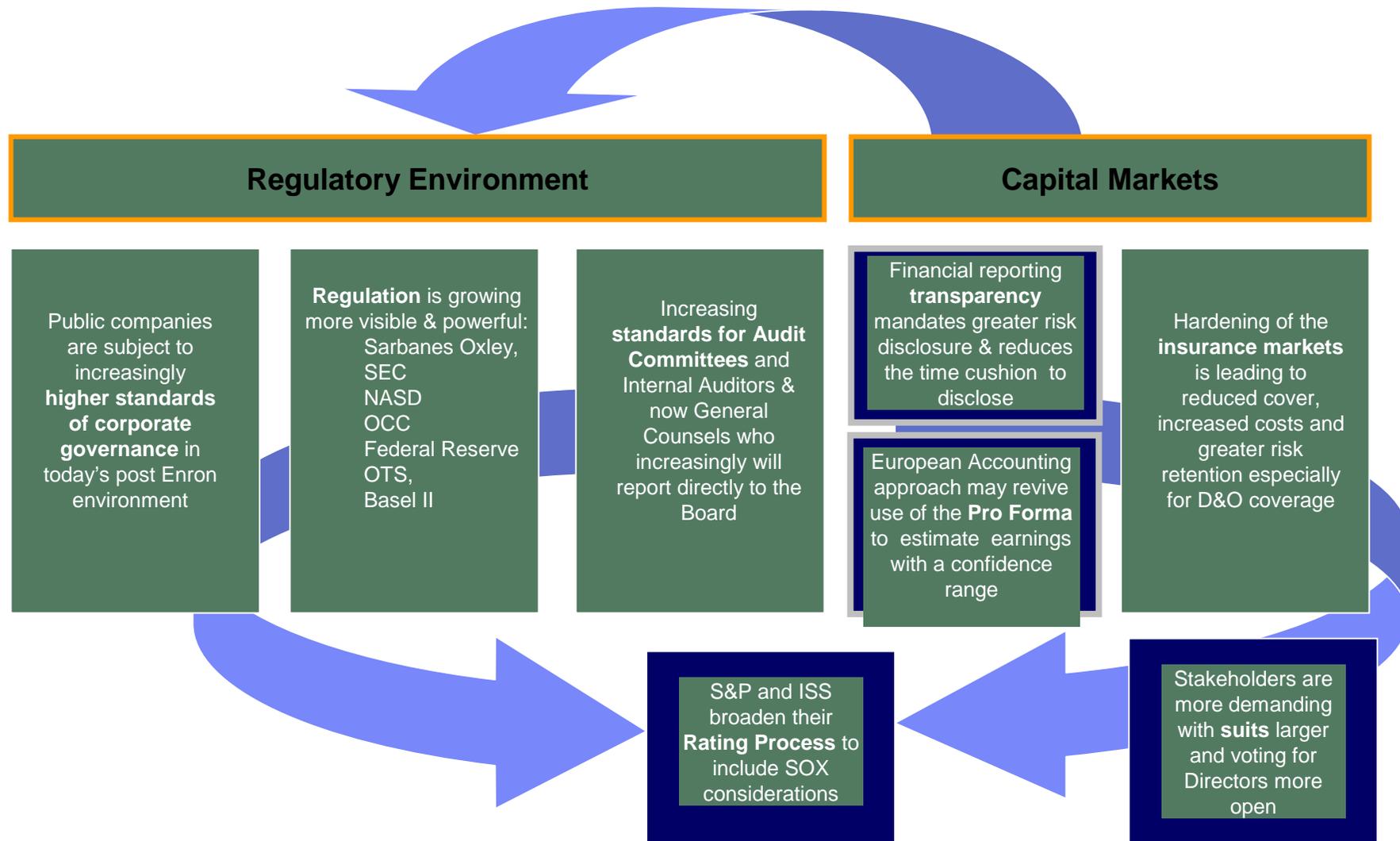
## Transfer

- Service Level Assurance program development and operation
- Service level identification, measurement and monitoring solutions
- Technical warranty programs
- Insured solutions
- Underwriting submissions

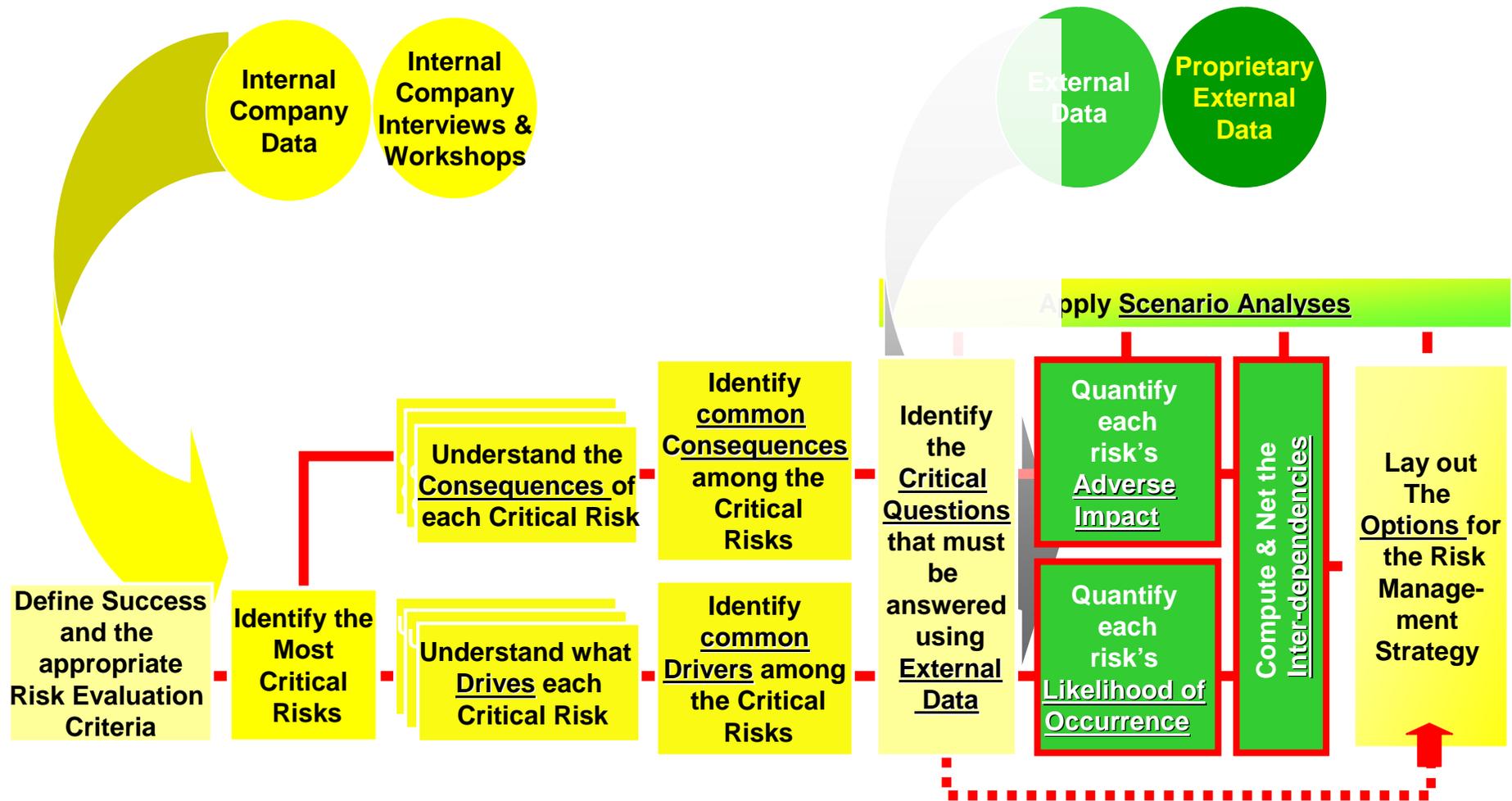
# Lack of Security



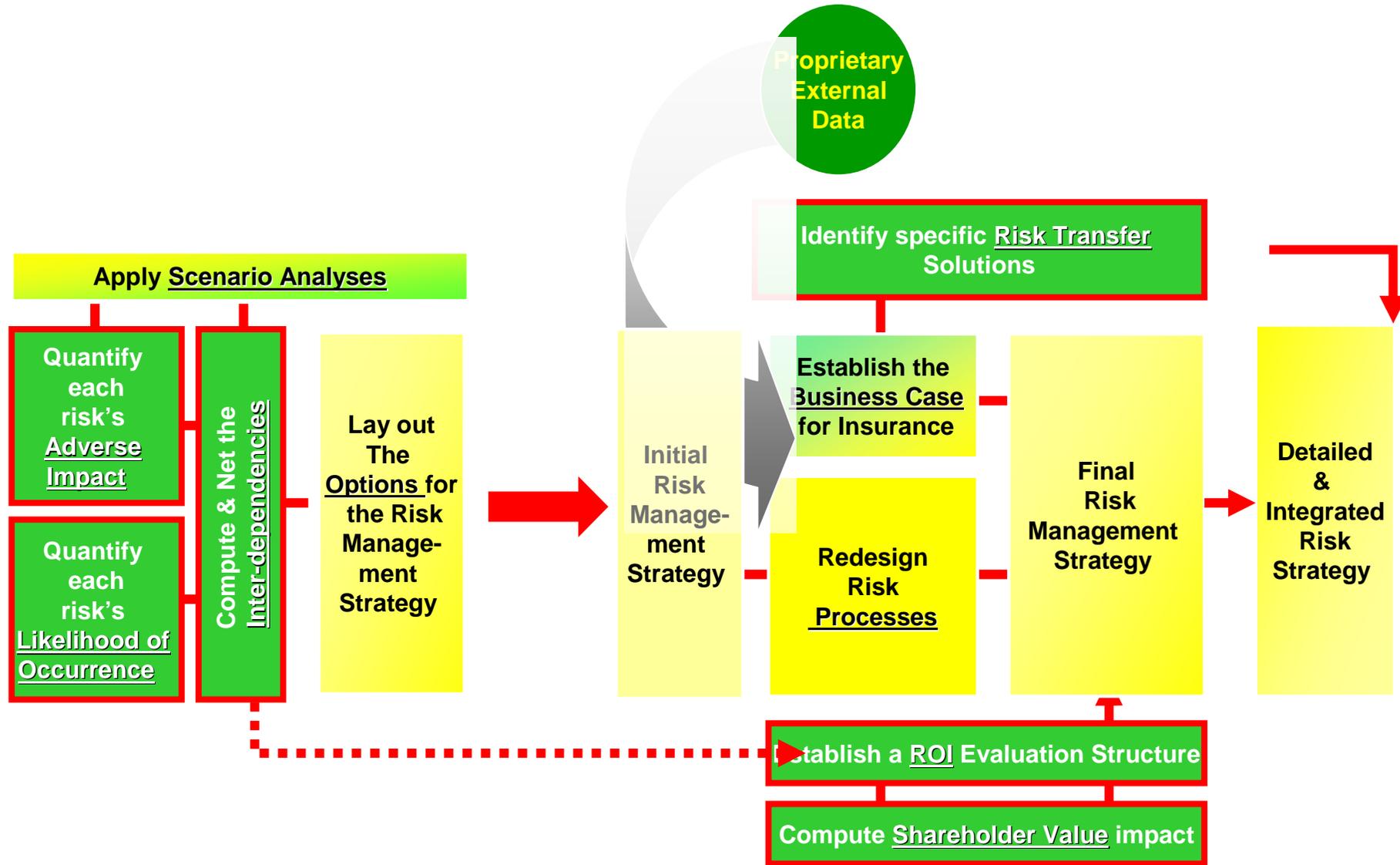
# The External Environment is driving the need



# Quantification



The key to quantification is External Data Gathering which often requires data from outside the company





### **Mark Braverman, Ph.D.** **Human Impact Leader**

#### **Experience**

- President, Crisis Management Group, Inc.—providing corporate crisis management, employee assistance, and organizational consulting to corporations and public agencies
- Provided training, case management, and acute crisis response to over twenty Fortune 500 companies and to numerous Federal Agencies, including the United States Postal Service
- Instructor, Harvard University School of Medicine Department of Psychology
- Co-Founder, Harvard University Center for Psychological Trauma Studies
- Developed innovative approaches to the prevention of traumatic stress across diverse groups
- Specialist in intervention with groups in community and workplace settings in the aftermath of a trauma or disaster
- Widely published, lectures and trains internationally on workplace violence, crisis intervention, and occupational mental health
- Author, *Preventing Workplace Violence*, Sage Publications, 1999

#### **Education**

- PhD, Clinical Psychology, Boston University
- Ed.M, Human Development, Harvard University
- BA, English and Comparative Literature, Columbia University



### **Frank P. Terzuoli** **Financial Compliance**

#### **Experience**

- Financial management at Citibank (Division CFO), Wells Fargo
- Mergers & Acquisitions specialist at Ford Financial
- Supervising Engineer at AT&T-conduit distribution planning
- Principal at Arthur Andersen & Accenture's financial institutions practice —enterprise risk, financial & strategy consulting
- Responsible for the development of sophisticated financial and economic models designed to determine shareholder value of unique operations
- California regional bank—small business Hispanic Market evaluation and credit risk analysis
- Large Credit Card company — credit risk modeling and forecasting
- Large California bank — trust regulatory-compliance analysis. Customer relationship manager data mapping
- Large Southern bank — distribution economic model for branch network; site evaluation modeling; consumer surveying

#### **Education**

- Graduate studies in finance, New York University
- MBA, Adelphi University
- BS, Rensselaer Polytechnic Institute (Physics)

## Example One.... The Ugly

- Merger banking institution retained us for 5 company merger and acquisition.
- Had heard all of the warning signs.
  - No Security plan
  - No history of events or logs
  - Unidentified security responsibility
  
- It was worse..
  - Software still in shrink wrap
  - Firewall turned off
  - Policies that existed were not enforced.

- About one billion in assets under management
- Buyout not approved
  - Security was not the sole factor but major.
  - Loss to investors of 19% value in holdings
  
- Aftermath.
  - Inbound spoof campaign diverted funds to Belize corporation
  - Customer list had been compromised
  - First four claims exhausted all available funds.
  - Company non existent

## The Bad....

- Financial Institution
- Ongoing Security spend was not matched to enterprise exposure
- Management identified the need but were unable to support internal funding requirements.
- With security identified response to event was able to occur

## The event....

- Personal records were sent to public domain through human error.
- Response began on a Sunday afternoon.....
- Legal advised all exposures complete by Monday afternoon.
- Cost saving to organization. \$17,000.00 per file

- Retail Outlet
- Had completed an Enterprise wide assesment.
- Security had been funded and incorporated into all strategies from production to backup an recovery.

## The event....

- Alternate data centre was compromised physically.
- Data was encrypted.
- Backup was effective for operation
- Recovery was complete in 48 hours.
- Insurance paid the claim
- Reconstructed the valuable data as asset had been scheduled.
- Savings of 3 million due to complete payout of loss.

In Security there are constants.....never enough money and

Never enough time...

Thank you for yours



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