

Overcoming Barriers to IDRI Implementation: Focus on Policy Making and Organizational Decision Making

by

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World problem

- Natural hazard disasters are a world wide problem that result from the collective, incremental and sub-optimal policies and management decisions made in
 - planning and design of urban land use
 - design and construction of buildings and infrastructure

Integrated Disaster Risk Management

- Effective management is key to implementation
 - Management is the process of establishing an environment at the policy level and organizational level where individuals engage in
 - » Planning
 - » Organizing
 - » Staffing
 - » Leading
 - » Controlling
 - Managers are responsible for effective and efficient institutional and organizational performance
 - Managers must also be responsive to the social, technical, political, legal and economic factors that affect institutional performance

IDRiM Implementation Challenge

- Shift focus from project based “technology fix” to improving “community resilience”
- Establish a process that incorporates management, analysis and communication tools for pre-disaster implementation
- Disaster risk management professionals develop skills to effectively influence and participate in the public policy process and organization decision making process about investment in innovative, cost effective, equitable means for increasing community resilience by reducing natural hazard risks

IDRiM Implementation Process

- Preparedness
 - Identify stakeholders
 - Negotiate agreements with community partners
 - Collect base line vital information
- Analysis
 - Analyze current public policy, organizational rules, procedures and agreements
 - Perform community hazard, vulnerability, risk analysis
- Planning - structured stakeholder workshops to formulate and validate recommendations on
 - loss reduction strategies for management of risk
 - risk transfer options
 - response and recovery
- Decisions - agreement on
 - specific projects, goals and objectives
 - measurement methods
 - organizational responsibility
 - budgets / capital investment requirements

Specific IDRiM Challenge

- Leaders must learn how to characterize and classify hazard problem, express it in the form of understandable choices, define the choices and their consequences
- Implementation is about taking actions that reduce hazard risk to communities
- Implementation is more social, political and economic than technical

IDRiM implementation requires development of

- Partnerships with community leaders
- Awareness campaign for
 - Understanding community risk
 - Building local capacity of local government enterprise leaders and authorities
- A system perspective which focuses on community resilience - social and economic well being

Focus on resilience is to focus on *System performance*

- Resilience has its roots in the study of natural – ecological *systems*
- Measure of a *system's* ability to sustain its integrity and remain stable when subject to a disturbance (i.e., make a smooth transition to new stable state in response to the disturbance)
- Resilience leads to a greater degree of sustainability - the ability of a *system* to absorb impacts and still persist

ACCEPTABLE PUBLIC POLICY

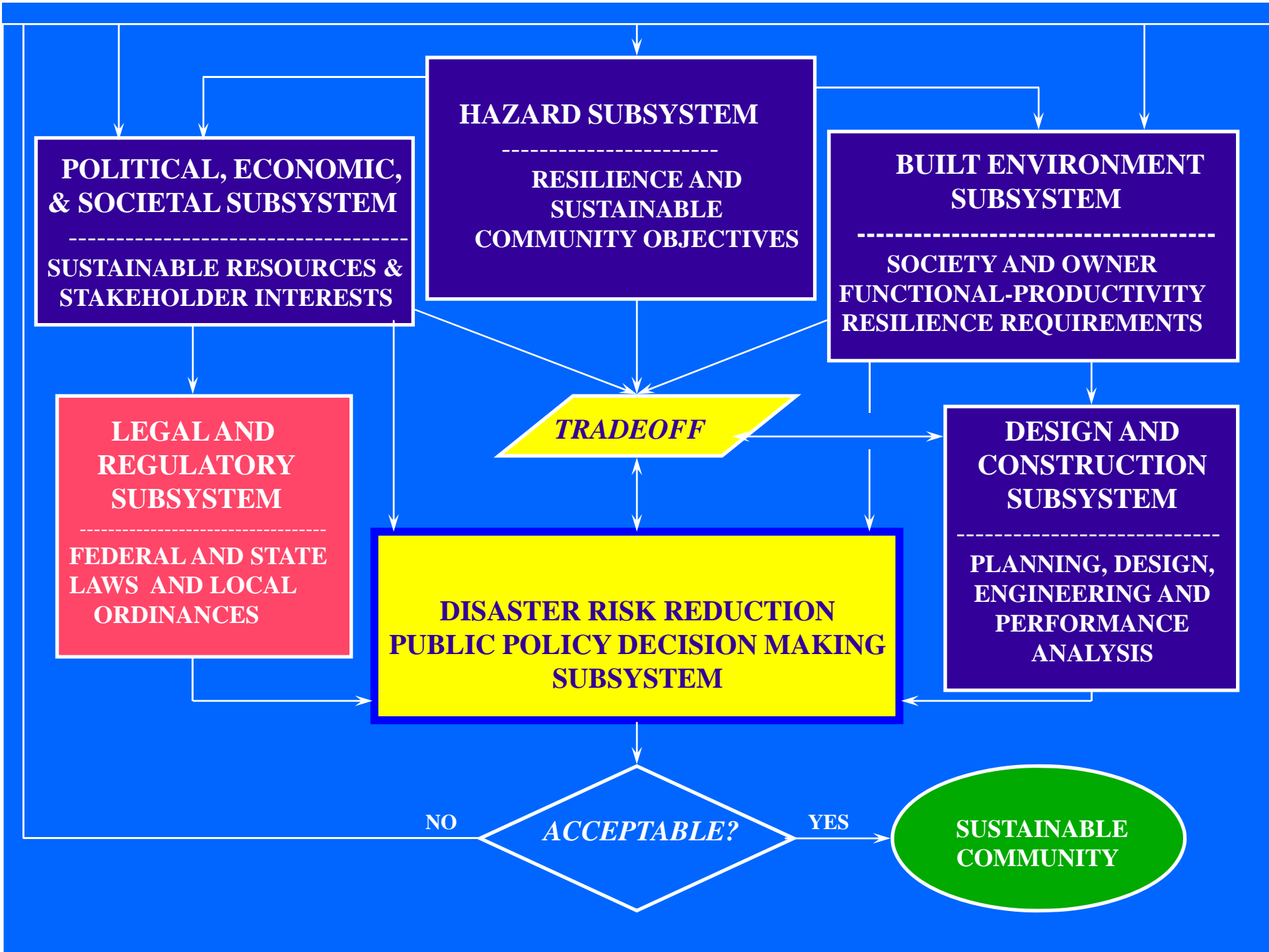
KEY TO IDRiM IMPLEMENTATION

Acceptable public policy

- Outcome of decision making and tradeoffs between needs and requirements of competing subsystems
 - Political, economic, & societal subsystem with stakeholder interests
 - Community and physical hazard subsystem with community resilience objectives
 - Built environment subsystem with owner and societal functional objectives
 - Legal and regulatory subsystem
 - Planning, design and construction subsystem

Public policy options tradeoff

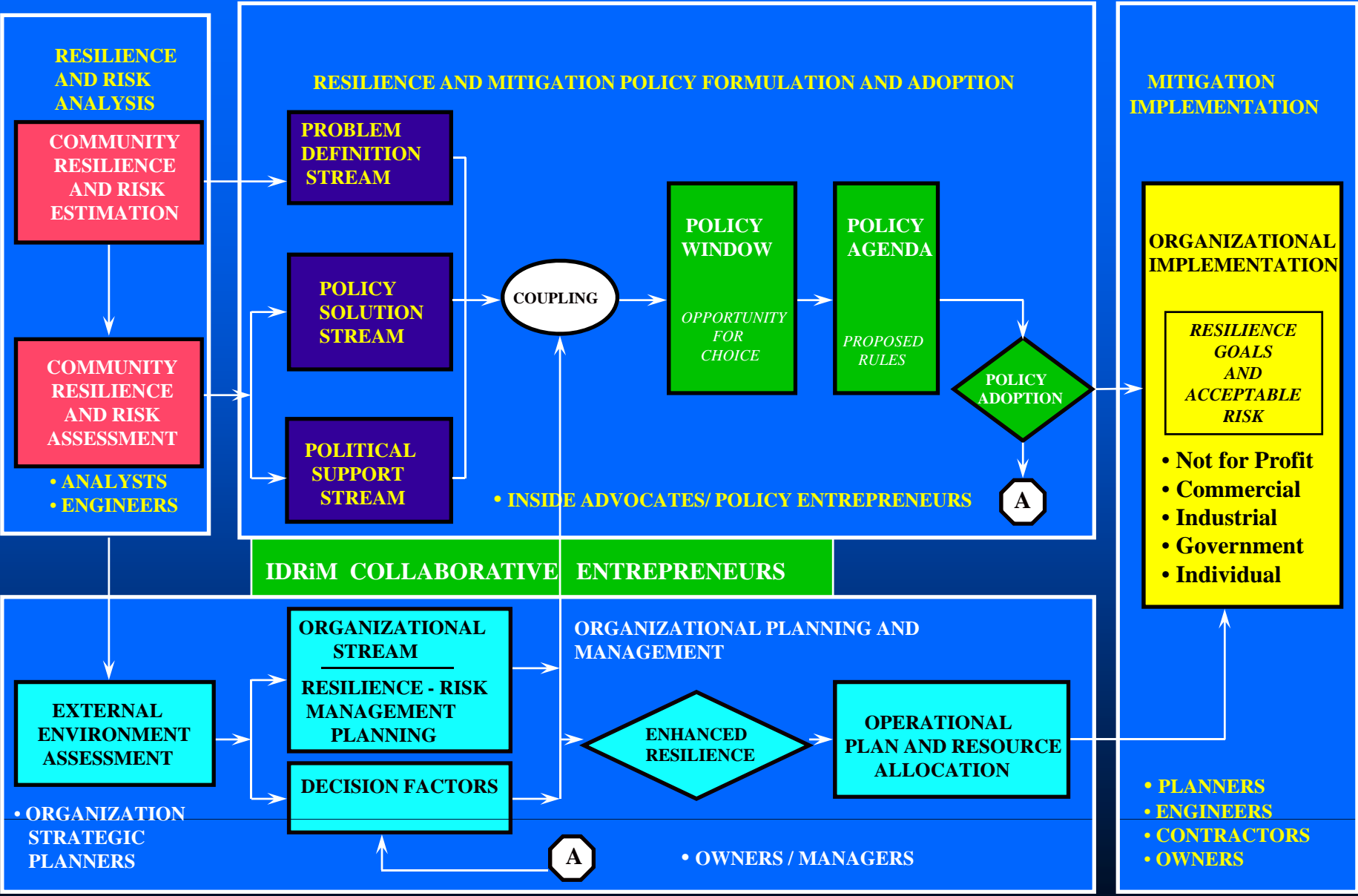
- Disaster risk reduction public policy output subsystem



Collaborative public policy system

- Risk analysts and engineers provide input to problem definition, assessment of solution alternatives, and education of community
- Collaboration among all key stakeholders - participative design process increases chances of acceptance by other critical stakeholders in the system
- Four process streams need to converge to achieve adoption of implementable policy outcomes
 - ✓ Problem definition
 - ✓ Policy solution
 - ✓ Political support
 - ✓ Organizational acceptance

PUBLIC POLICY ADOPTION COLLABORATION MODEL



**IMPLEMENTATION REQUIRES
MANAGERIAL ACTION**

**ORGANIZATION STRATEGIC
MANAGEMENT DECISION
MAKING PROCESS**

Implementation - most critical component of strategic management – without it nothing happens

- Risk management strategy formulation, evaluation and choice - requires full consideration of implementation requirements and consequences
- Organization management provides for integration and coordination that facilitates coping with strategic issues – integration is required to implement risk management strategies

Situation variables - context - for organization decision making

- Factors controlled by enterprise managers and those uncontrolled in the environment
- Management strategy meets public policy regulatory requirements and engineering solutions
- Difficulty with “one best engineering way” to achieve the organizations functionality objective

Understanding decision making context helps achieve appropriate strategy by

- Addressing the right questions (e.g., what is at risk of failure)
- Understanding risk issues (e.g., knowledge of risk)
- Clarifying risk management options (e.g., retrofit, build new, change occupancy)
- Meeting desired outcomes (e.g., organization objectives, return on investment, resilience, sustainability)

Implementation isn't all that easy

- Organizations that manage change and pay for it
 - Operate in their specific situational context
 - Frame the problem as they see it
 - Use different decision criteria
 - Emphasize processes more than tools
- Advocates for risk reduction often assume that decision makers frame problems the same way they do, but they don't

Situation variables affecting organization investment decisions

- General economic conditions
- Borrowing-debt capacity
- Relationship to financial institutions
 - Lenders - insurers
- Business objectives
 - Short term return vs. business continuity
 - Market share
- Type of organization ownership
- Incentives /disincentives
- Ignorance - lack of knowledge of risk
- Objective versus perceived risk
- Fiduciary responsibilities
- Moving target in regulatory requirements

Institution / organization management planning model

- Examine and understand situation variables affecting risk management decision making
- Assess risk management decision options
- Assess institution / business vulnerabilities
- Assess stakeholder risk expectations in terms of damage, downtime, death and injury
- Clarify institution / business risk acceptability
- Evaluate risk management decision alternatives
- Develop institution / business risk management plan
- Implement integrated disaster risk management (IDRiM) plan

SITUATION FACTORS AFFECTING RISK MANAGEMENT INVESTMENT DECISIONS

A. HAZARD / RISK

- 1. Perceived
- 2. Objective
- 3. Tolerable Risk
- 4. Risk Averse

B. INSURANCE

- 1. Availability
- 2. Coverage
- 3. Cost

C. TECHNOLOGY

- 1. How reliable
- 2. Rate of change

D. RISK DECISION ANALYSIS

Mitigation Decision	Decide Now	Gain Time	Gain Info.	Gain Control
Event				
Vulnerability				
Exposure				

E. FINANCIAL CAPACITY/ECONOMY

- 1. Market Conditions
- 2. Availability of Capital
- 3. Debt Capacity
- 4. Liquidity
- 5. Cost of Mitigation
- 6. Occupancy

F. REGULATIONS

- 1. Retrofit
- 2. Occupancy
- 3. Other Required (i.e...: Asbestos)

G. LIABILITY

ASSESS BUSINESS VULNERABILITIES

- Physical Facilities
- Market Share
- Service / Productivity
- Financial and Physical Resources
- Social - Public Responsibility
- Liability

RISK MANAGEMENT DECISION ALTERNATIVES

- 1. Do Nothing
- 2. Buy Insurance
- 3. Minimum Retrofit
- 4. Total Retrofit
- 5. Change Business Functions
- 6. Relocate Business Functions

CLARIFY BUSINESS RISK ACCEPTABILITY

- Risk Perception
- Risk Aversion
- Risk Tolerance
- Risk Spreading

EVALUATE LOSS REDUCTION STRATEGIES

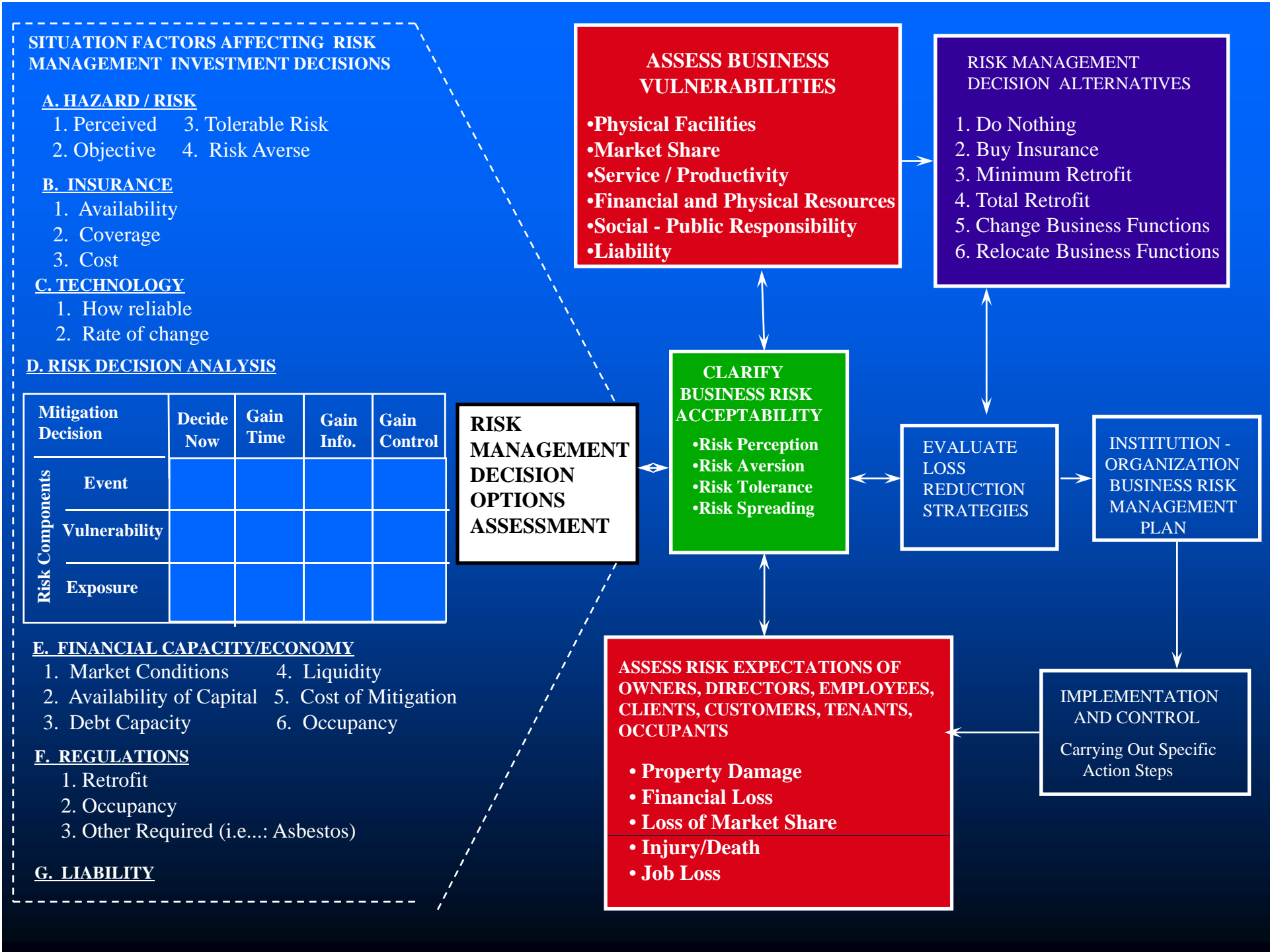
INSTITUTION - ORGANIZATION BUSINESS RISK MANAGEMENT PLAN

RISK MANAGEMENT DECISION OPTIONS ASSESSMENT

ASSESS RISK EXPECTATIONS OF OWNERS, DIRECTORS, EMPLOYEES, CLIENTS, CUSTOMERS, TENANTS, OCCUPANTS

- Property Damage
- Financial Loss
- Loss of Market Share
- Injury/Death
- Job Loss

IMPLEMENTATION AND CONTROL
Carrying Out Specific Action Steps



Types of organization ownership

- Private – equity ownership
- Third Sector – “not-for-profit”
- Public – government owned and operated

Organization types / complexity

- Private - investor owned
 - Large conglomerates of business campuses and facilities to small independent businesses
- Not for profit –third sector (e.g., hospitals)
 - Religious
 - Proprietary
 - Small single facility versus large multi campus facilities
 - Many have missions reflecting charitable and public service concerns
- Public sector owned
 - City, County
 - State
 - Municipal
 - Small to large urban complexes
 - Mission to serve public needs

Different organization types – require different approaches

- Organization, stakeholder expectations and alternative courses of action are different for each organization type - public, private and third sector
- Each serve different roles in society
- Tactics that work in private sector may not be appropriate in public or third sector
- Decision framing and decision practices in each sector are different

Thus,

- Strategic approaches need to be developed with knowledge of the organizations decision context and solutions tailored to fit

What have we learned?

What we have learned is:

- What appears to be simple is not
- Simple approaches lack an integrative framework that bridges disciplines and scales of analysis
- Implementation does not necessarily follow authoritative policy making
- Implementation is politics continued by other means
- Each stakeholder approach is built upon a particular worldview – scientific, technological, economic or political
- Compromises can be arrived at through the political process, but, mediation among stakeholders is irrelevant if it is not based on an understanding of the multiple dimensions of the problem

Enhancing risk reduction

- Understand, risk based decision making is inherently a political process
- Many players, each with different understanding, struggle to reach some modest agreement on what constitutes the problem and what constitutes a workable solution
- Problem solving is most often constrained by the larger environment within which the process takes place

Effective implementation

- Depends on the extent to which public policy is congruent with values and goals of organizations or institutions operating environment
- Recognizes the needs of those expected to actually implement disaster risk-reduction measures and to pay for them

Agreed upon objectives

- A key component of implementation is measurement
- Scientists and engineers can state what community resilience “ought to be”
- Public policy makers “set standards” that define resilience in the public interest
- Institutions and organizations decide on an “acceptable level” of resilience for their situation

What now?

- Policies and investments leading to hazard reduction require integration of linked geophysical and technological knowledge with economic and institutional practice to overcome disconnects due to worldview limitations in each field
- IDReM must develop a framework to help integrate across disciplines in order to better understand systems of linked processes

How to increase community resilience?

- Develop advocates with clear understanding of how to achieve improved resilience through risk reduction by
 - Developing an understanding of differences in disciplinary approaches and means for integration
 - Developing an understanding of organization decision making processes for investing in risk reduction in the built environment

Thank you for your kind attention