

# Rethinking Basel II for Operational Risk

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*All comments presented here  
represent the views of the speaker  
and are not necessarily the policy  
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*All examples are for illustrative  
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**Fields Institute**

**Toronto Ontario**

The capital charge in most financial institutions is largely determined by actuarial models that

- provide little insights into the actual risk factors that drive the operational risks exposure and remains an abstraction for most business managers.
- Operational risk reporting largely consists of reporting losses after the fact to mostly those that were actively involved in resolving the loss event, accompanied by an abstract capital amount and either aggregated RCSA/KRI information or pages and pages of detailed risk issues that are not actionable to the recipients of the report.
- So what to do?

Basel Committee  
on Banking Supervision



International Convergence  
of Capital Measurement  
and Capital Standards

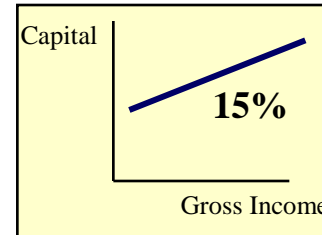
A Revised Framework

Updated November 2005



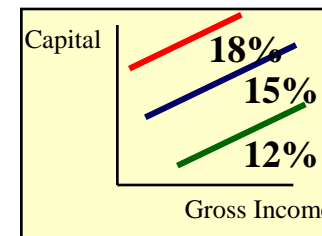
BANK FOR INTERNATIONAL SETTLEMENTS

## Basic Indicator Approach (BIA)



■ Entire Bank

## The Standardized Approach (TSA)

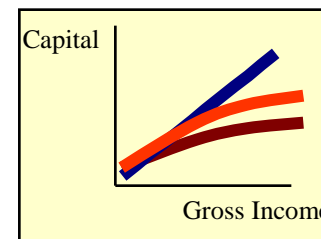


■ Corporate Finance,  
Trading and Sales  
Payment and Settlement

■ Commercial Banking  
Agency Services

■ Retail Banking,  
Asset Management,  
Retail Brokerage

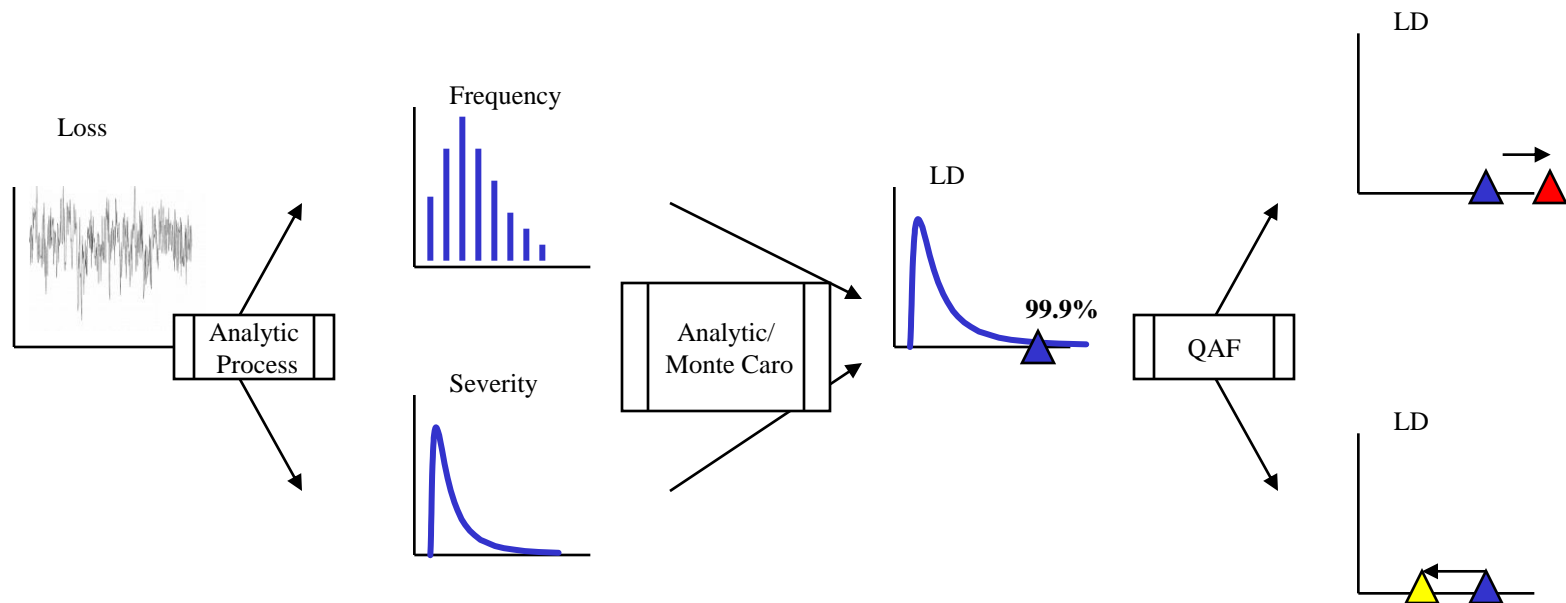
## Advanced Measurement Approach (AMA)



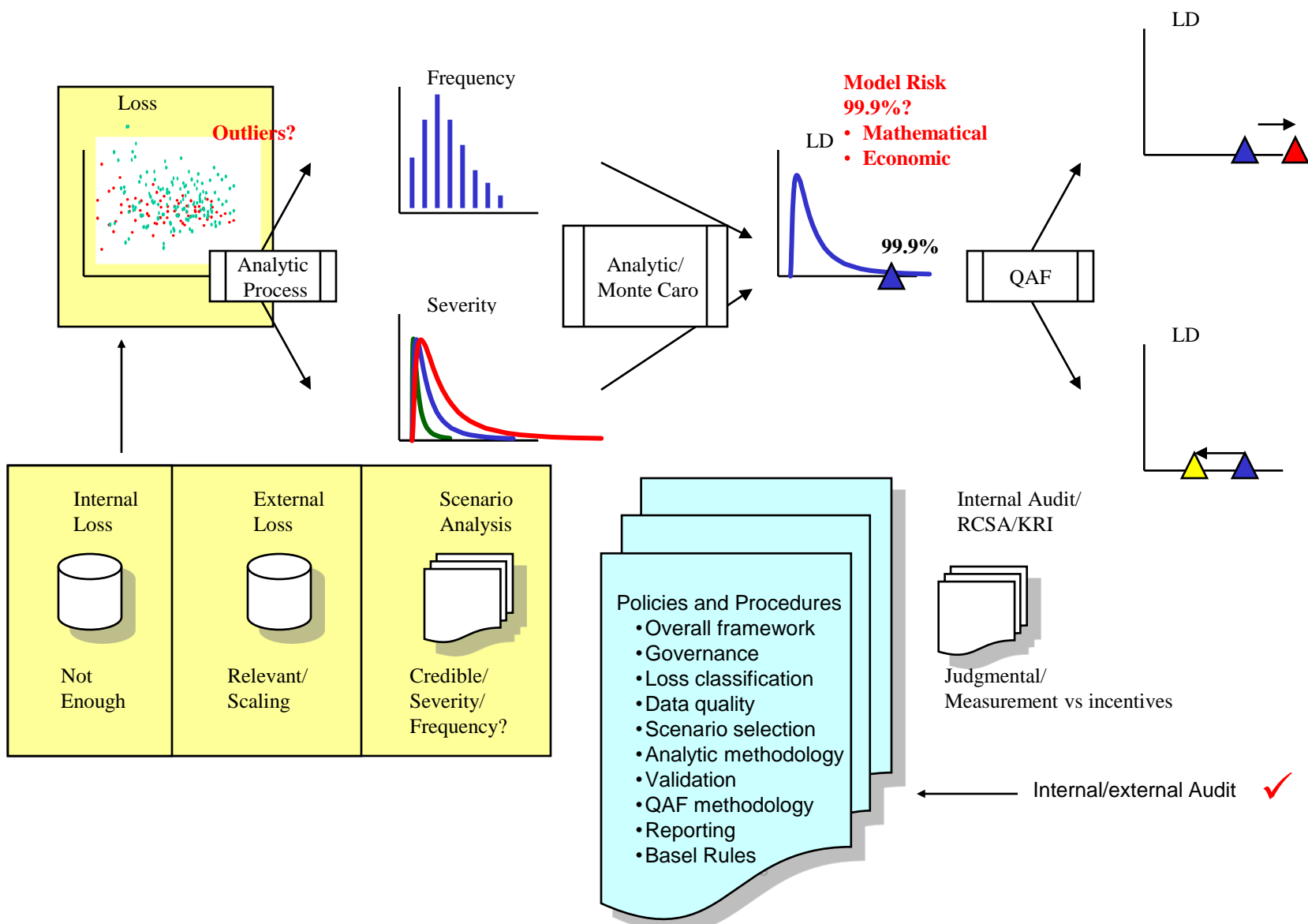
TSA: exposure linear with Gross  
Income

AMA: exposure non linear and can  
be reduced by reducing actual loss  
experience

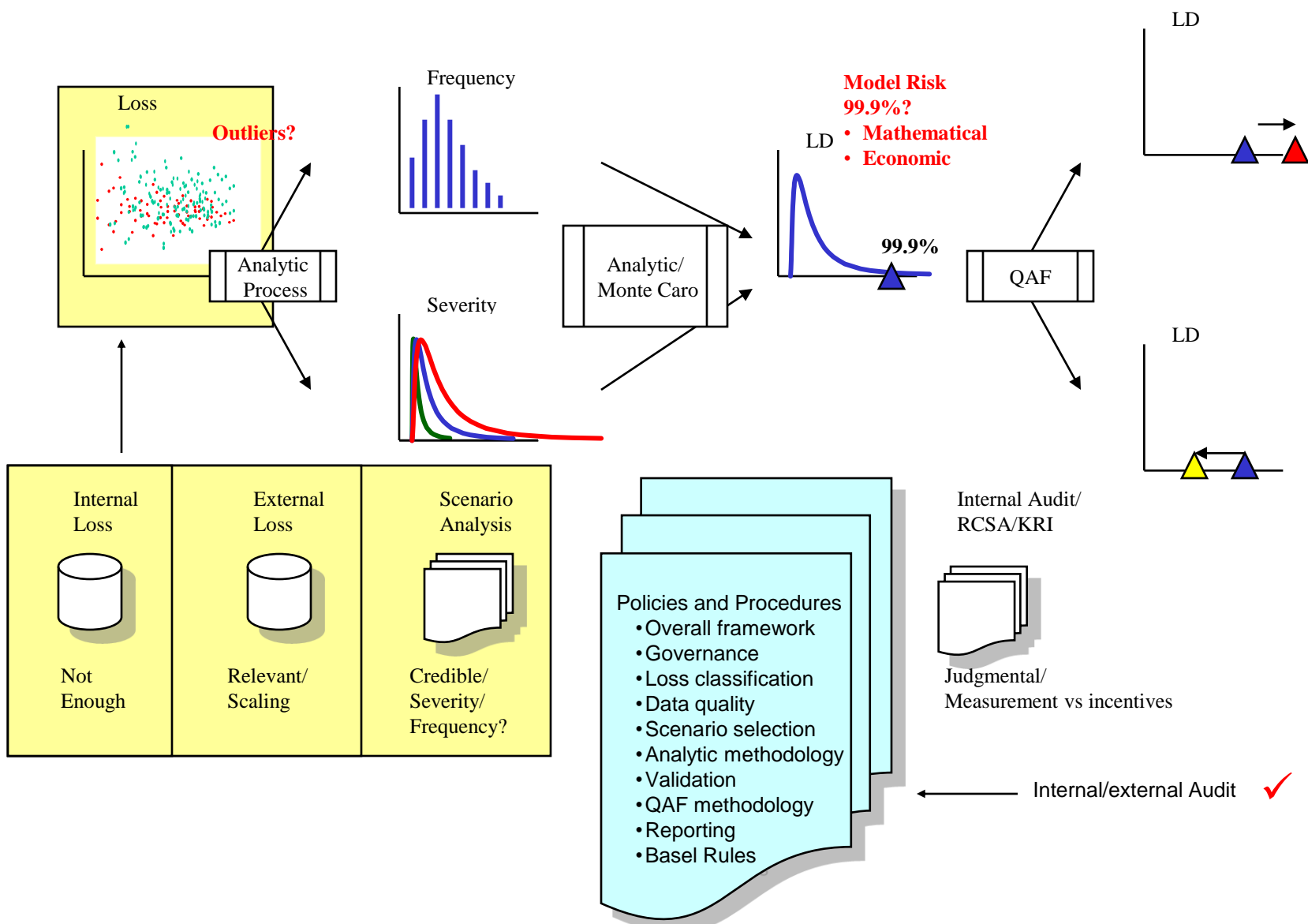
AMA: exposure can be reduced  
further by improving RCSA results



The end result: applause



The end result: **general sense of dissatisfaction in the blues**



## 10 years of ORM: Where is the Value?

### OpRisk & Compliance

#### Vol 7 no12 Editors Letter

- ....I think it (op risk) has hit crossroads
- .....Fresh thinking is need on op risk

#### Commemorative Issue Jan 2009

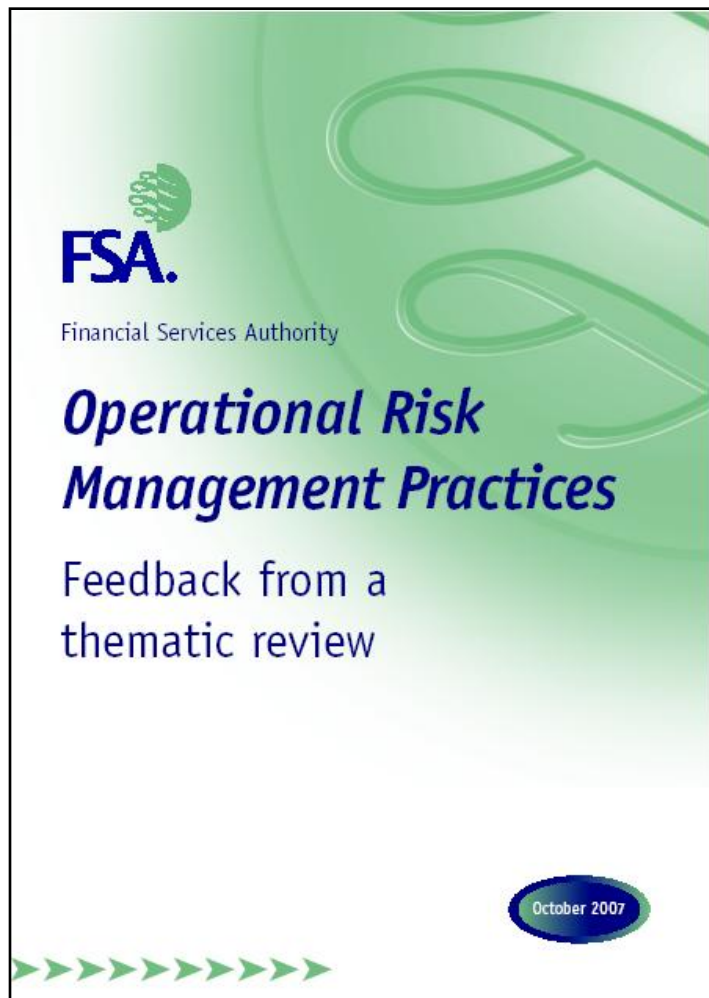
- Top 50 regulators, banks' risk management departments, insurance agencies, academia and assorted consultants
- .....common theme is need to reinvent op risk

#### The Bottom Line

- .... the current approach (Basle II) produced tremendous progress in understanding since late 90's
- BUT the current approach is not achieving the potential of ORM to deliver value
- It is largely a compliance exercise

#### What to Do?

- What NOT to do  
the same only more and better
- more mathematization
  - more details



## Main findings

.... *More work is needed to ensure the risk assessment process produces useful results*

..... *Most firms still did not seem to consider the impact of business changes might have on their OR profile*

..... *Most of the firms we visited were actively planning to improve management information, usually because it was too detailed.*



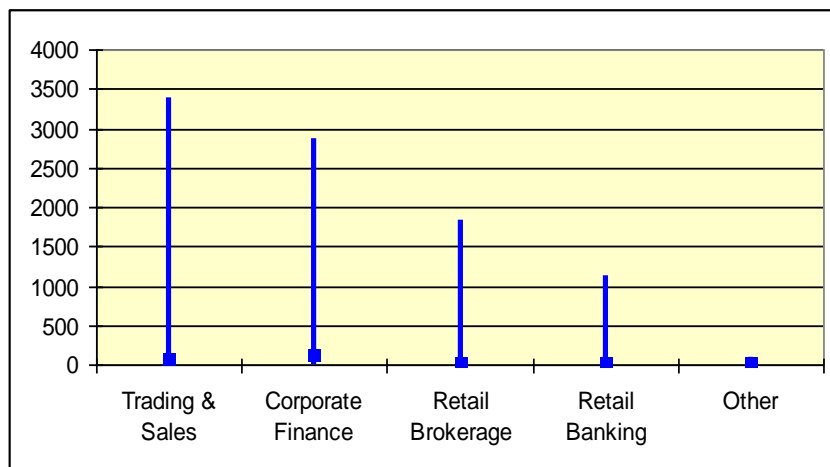
## The Issues

- Governance:
  - ORM is a tagged on function to Compliance/ COB/IS/Security/Operations;
- Risk Identification
  - Vast lists of what can go wrong
  - Complicated/ Hard to determine what is important
- Assessment/Measurement
  - Opaque measurement by curve fitting
  - No insight into risk drivers
- Monitor/Report
  - Aggregation (KRI/RCSA) into meaningless
  - Endless list of issues
- Manage/Control
  - Causal relationships
  - No surprises

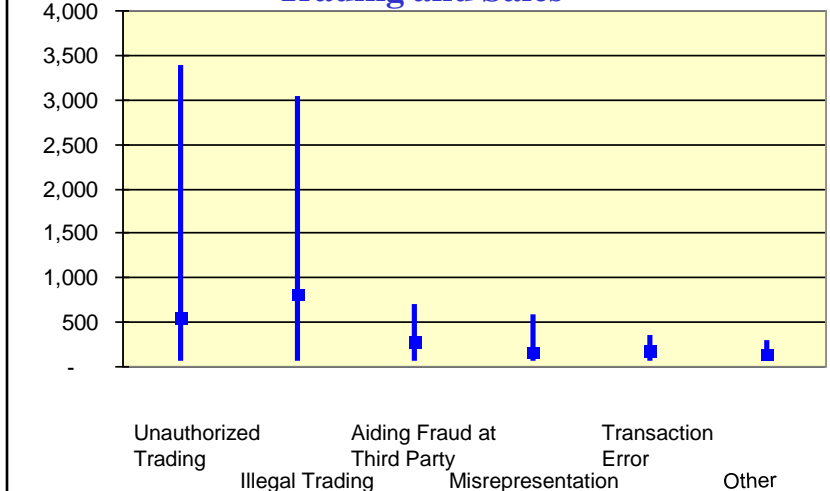
## The Solutions

***Back to Basics: What Industry Data Tells Us***

## All Lines of Business



## Trading and Sales



## Losses tend to

- Differ by LOB
- Show higher frequency lower severity for retail banking relative to trading and Sales
- Each LOB has characteristic loss profiles dominated by a few loss types.
- For Trading and Sales most of the large losses are of these types
  - Unauthorized trading
  - Illegal Trading
  - Aiding third party fraud
  - Mis representation
  - Transaction errors

## The Issues

### ■ Governance:

- ORM is a tagged on function to Compliance/ COB/IS/Security/Operations;

### ■ Risk Identification

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### ■ Assessment/Measurement

- Opaque measurement by curve fitting
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### ■ Monitor/Report

- Aggregation (KRI/RCSA) into meaningless
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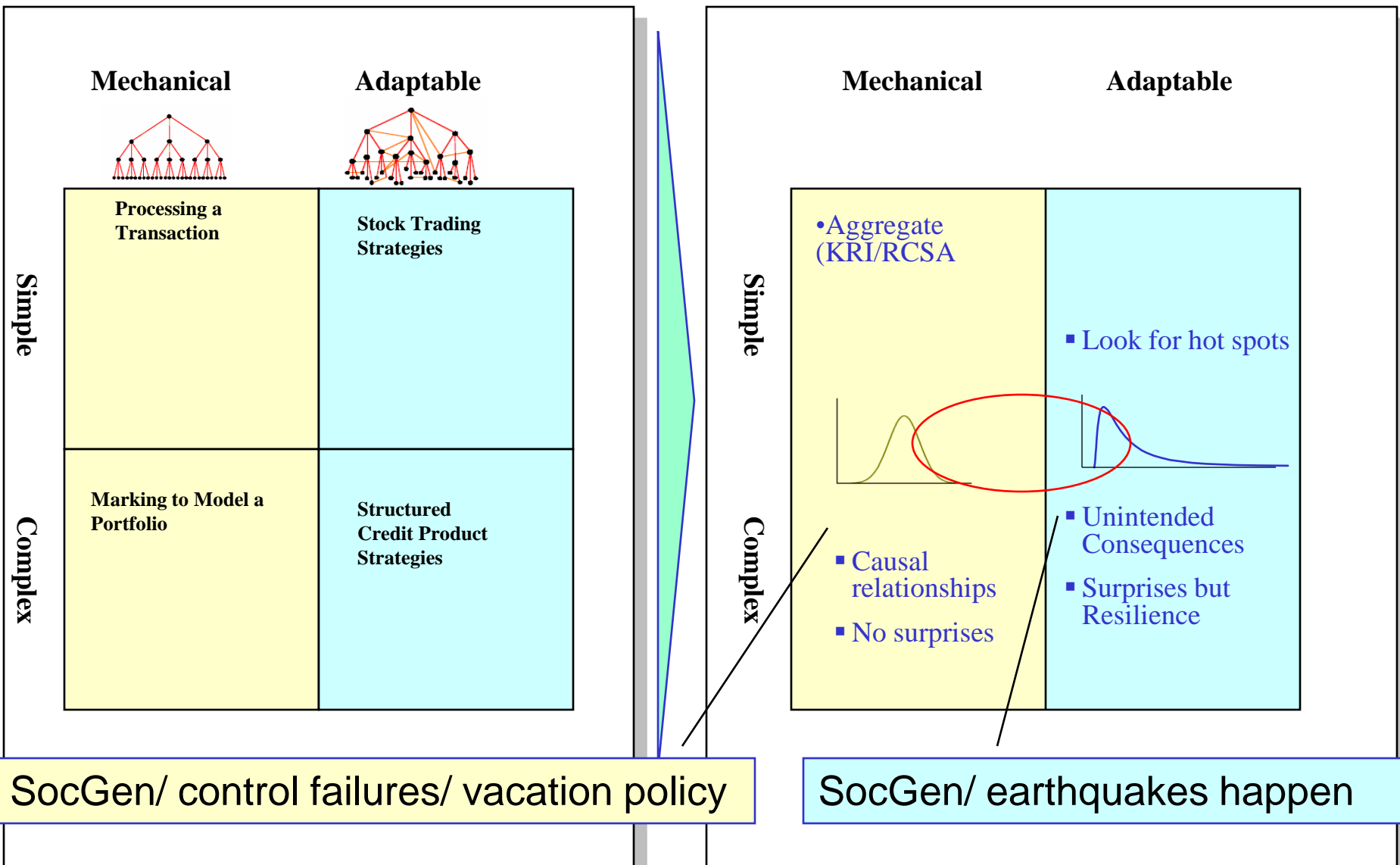
### ■ Manage/Control

- Causal relationships that don't last
- No surprises that keep on surprising

## The Solutions

***Back to Complexity:  
Organizations are  
complex and adaptive***

It is not either or it is and



- Quantitative & qualitative requirements for AMA implementation
- Designing your AMA framework: discovering sources of AMA model risk
- Framework validation: hurdles to successful implementation.
- Role of internal and external audit
- After implementation
- Do the LDA for Regulatory Capital, but don't get distracted by the mathematics
- Focus on Management of Operational Risk, by recognizing which combination of people, process and systems form a mechanical system and which form a complex adaptive system (CAS)
- Apply most of what is recommended by Basel/Consultants/Vendors to mechanical systems, the results will be good.
- Avoid applying these to CAS, the results are worse than useless, instead focus on being resilient.

# ***Discussion***