

# 2006 ACORD LOMA Insurance Systems Forum

## Enterprise Risk Management

Chris Suchar

DFA Capital Management, Inc.

914-701-7220

[cs@dfa.com](mailto:cs@dfa.com)

# Mapping Business Needs to Technology

**Business Function**

**Risk and Capital Management**

Internal and External

**Investments**

ALM and Hedging

**Finance and Product Management**

Product Mix, Pricing, Planning, Performance Management, Reinsurance

ERM Framework and Processes

**Technology Layer**

**Enterprise Risk Analytic Platform**  
**Enterprise Process Risk Management**

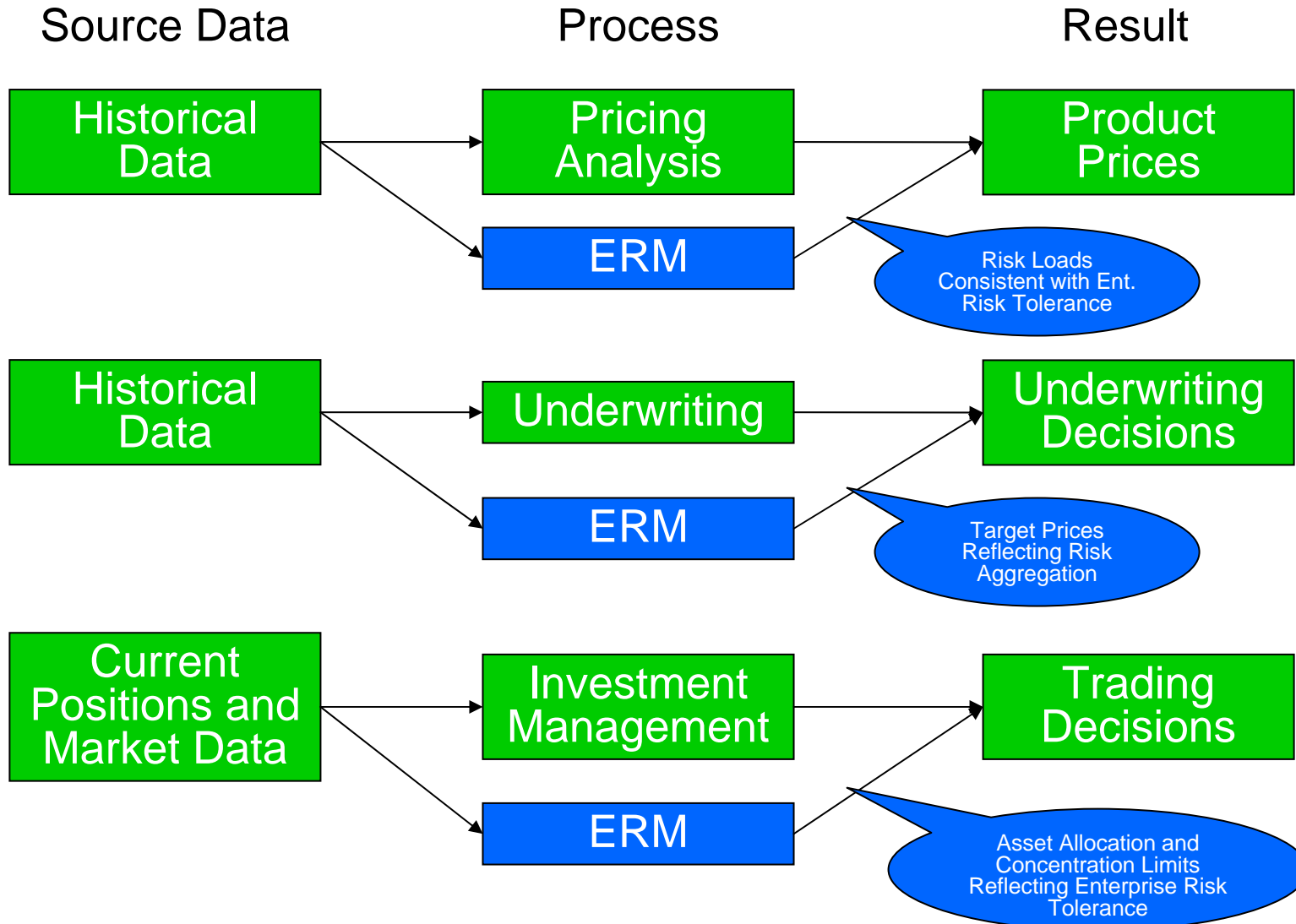
**Business Requirements**

- ◀ Enterprise View
- ◀ Integration with Business Processes
- ◀ Rapid Decision Making
- ◀ Compliance

**Technology Requirements**

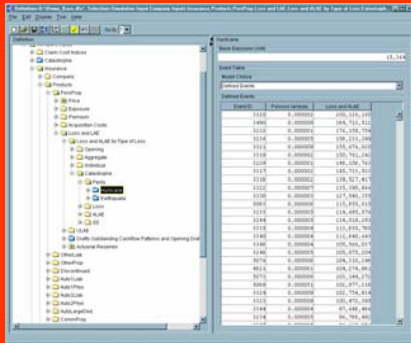
- ◀ **Scale:**
  - Assets, Liabilities, Life and P/C on one platform
  - Cash flow and accounting views
  - Simulation approach dictated by complexity of business
- ◀ **Workflow Management**
  - ◀ Internal Integration
  - ◀ External Integration
  - ◀ Reporting Capabilities
- ◀ **Speed:**
  - True Distributed Processing
  - Leverage Grid Computing
- ◀ **Data:**
  - Automated
  - High Frequency
  - Low Lag
- ◀ **Audit-ability**
  - ◀ Control
  - ◀ Meet technical criteria of all regulators and rating agencies

# Examples of How ERM Relates to Existing Business Processes



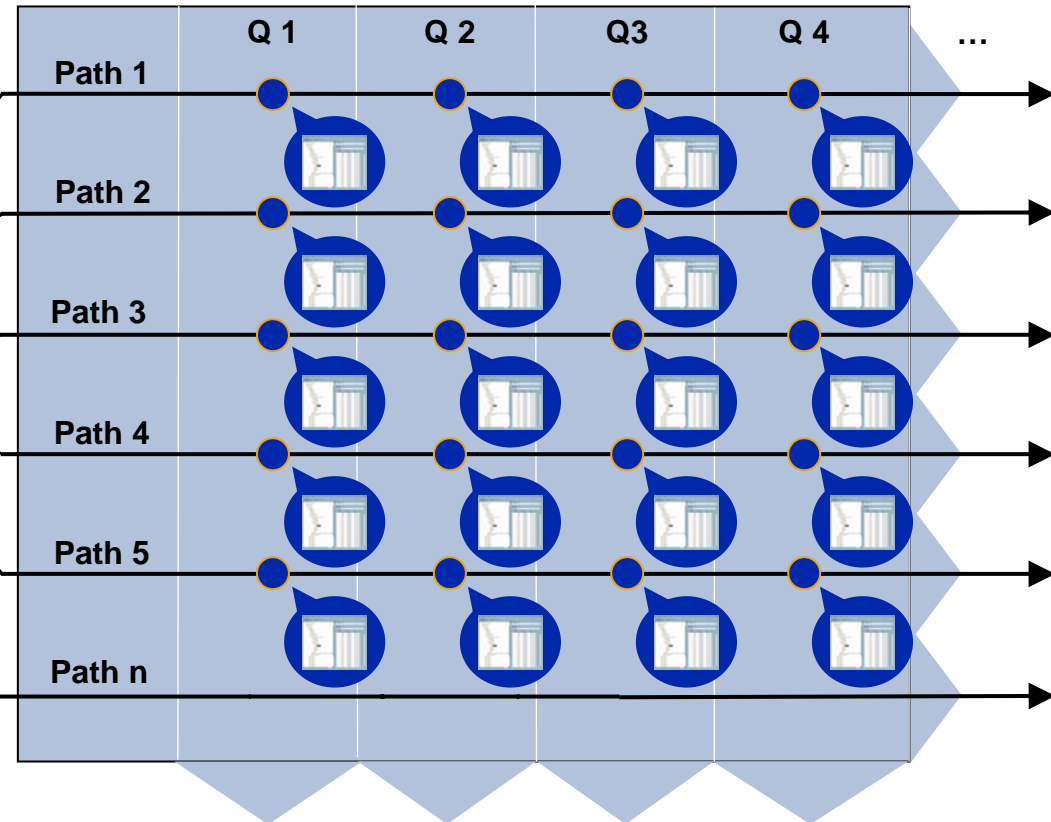
# Simulation Modeling Approach

Current State



Start of Simulation

“Database of the Future”

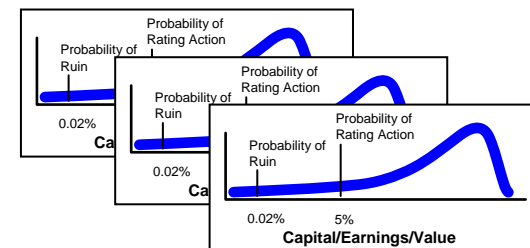
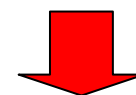
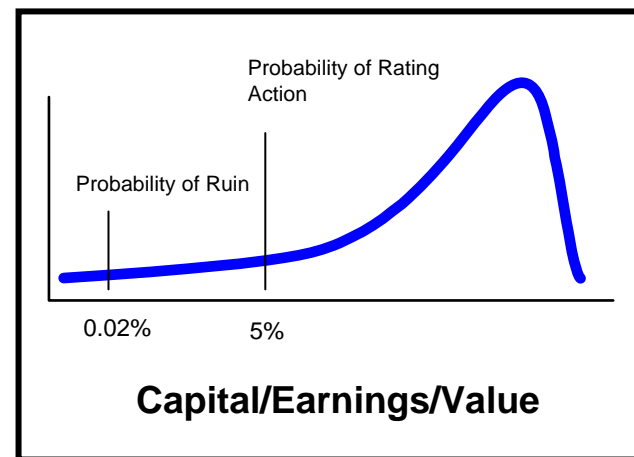
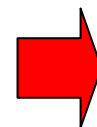
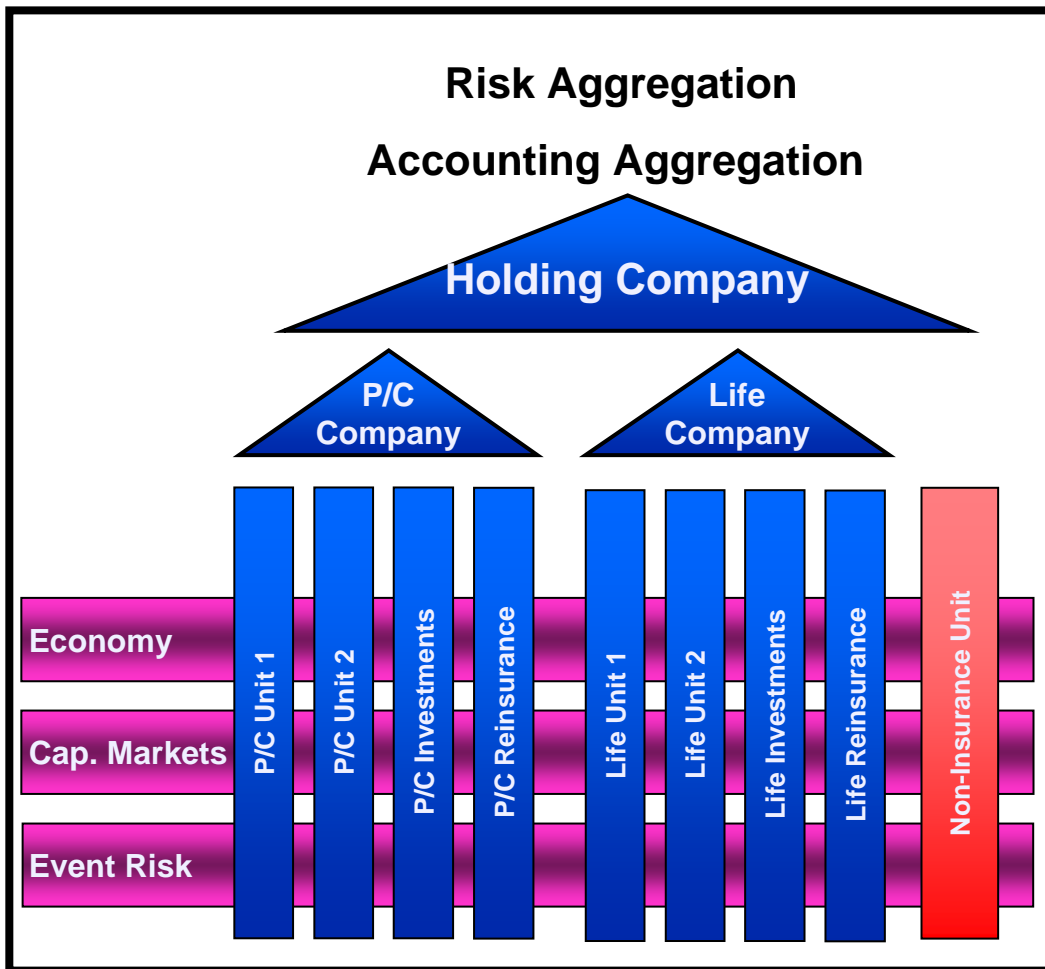


- Current financials, business plan, actuarial models

- High performance, distributed computing

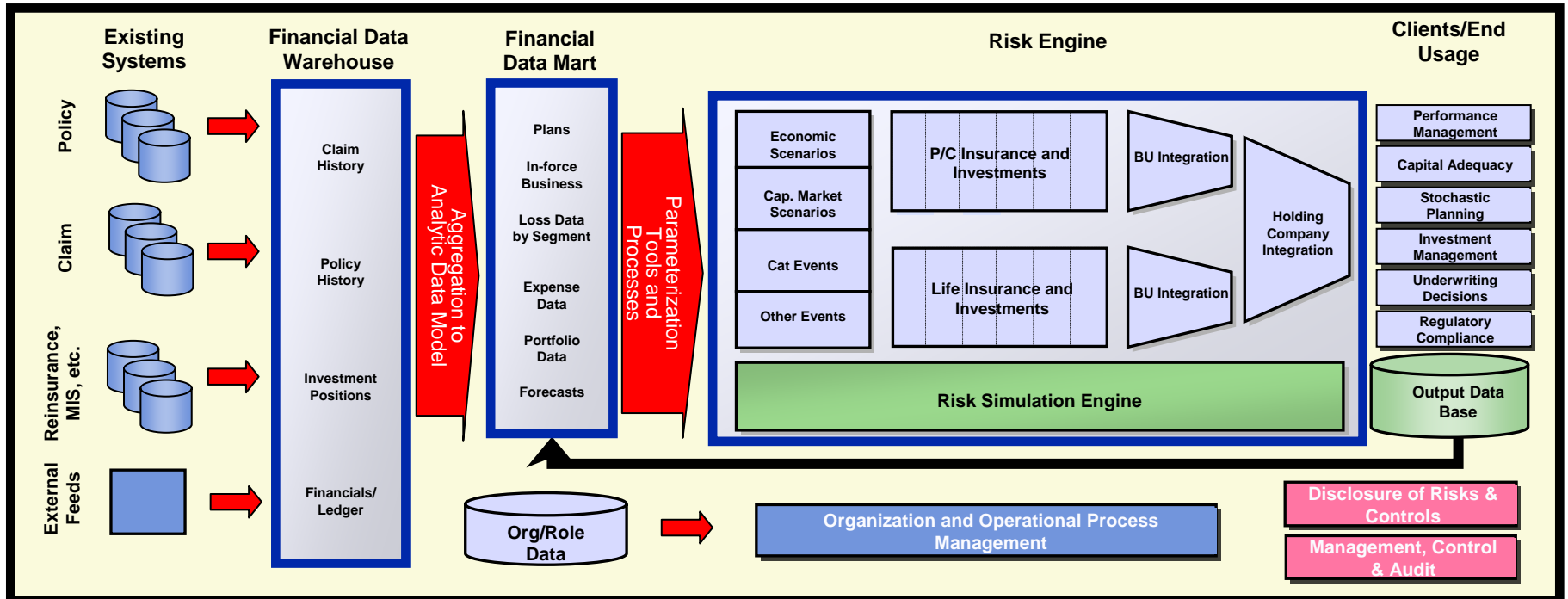
- Massive output data – storage, query/reporting

# Holding/Operating Unit Integration



- Integration across all BU's
- Integration across multiple functional areas

# System Architecture



## • Integration with:

- Planning, Budgeting, Ledger
- Investments
- Actuarial
- Product Lines
- External – customers, partners, counterparties

## • Op Risk Process Management:

- Extensive workflow monitoring, measurement and control

## • Decision Support Requires Update with High-Frequency and Low Lag