The Road to Sustainable Risk Management – The Role of Operational Excellence

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David McGraw, SVP & Chief Financial Officer
Teachers in Ontario have had pensions since 1917:
- Run by government ministry

**OTPP created in 1990 by transferring $17 billion from Ontario Government:**
- Jointly Sponsored Pension Plan:
  - Government of Ontario and Ontario Teachers’ Federation
  - Independent Board of Directors (9)

**Responsible for retirement income of:**
- 179,000 active members
- 124,000 retirees/families
- 69,000 inactive members

**Net investment assets of $138.9 billion as at Dec 31, 2013:**
- Equities, 45%
- Fixed Income, 41%
- Natural Resources, 8%
- Real Assets, 22% (real estate, infrastructure)
- Absolute Return Strategies, 8%
- Money Market, -24%
Significant investment to achieve long term sustainable risk management objectives has typically required a **burning platform**:

- Financial crisis
- New regulatory reform
- Legacy systems that don’t meet current needs or just don’t work – systems get “rusty”!

**Examples:**

- IIF & McKinsey & Company Study identified Financial Services are making substantial investment in data and risk management
- JPMorgan Chase & Co announced plans to spend an additional $4 billion and commit 5,000 extra employees to fix risk and compliance issues - Wall Street Journal
“You Can’t Manage What You Can’t Measure”

Substantial investment in data and risk management

Major Themes of IIF / McKinsey Study

- Data standardization and risk aggregation
- Front-to-back operating model
- Applications, architecture and infrastructure
- IT organization, governance and security
The Journey

- **First Pension Plan to embark in derivatives trading**
- **Increasing volumes and product complexity put pressure on legacy systems**
- **Identified need to address systems and processes – validated in 2008**
Operational Excellence

- Organizational structure / support aligned to the Investment process
- Deliver value for money
- Improve our ability to measure and manage risk
- Streamline and automate key processes
- Eliminate waste
- One authoritative, reliable, trusted data set
- Complete and timely reporting
- Infrastructure to support requirements
- Defined approach for accessing data
Data Challenge

A 2013 survey co-sponsored by EY & International Institute of Finance reveal top two challenges in implementing Basel III are – Data Availability and Quality & Systems Architecture.
A survey conducted by IBM identifies that “Value Integrators” outperform...
Architecture is a plan with organizing principles and design objectives.

High complexity with high cost and low agility.

Appropriate complexity with cost aligned to value and required agility.

Planning
- Architecture
  1. Framework
  2. Roadmap
  3. Principles
  4. Process

Implementation
Data Governance - Objectives

- A “single source of the truth” for data
- Availability of high quality, complete data
- Simplification of data access
- Defined data support
Data Governance – End State

Source Systems
- Bloomberg
- SimCorp
- Findur
- Others

Organized Data
- Financial Instrument
- Valuations
- Legal Entity

Delivery
- Web Service
- Cube-ready
- Tables & Views

Reporting Systems
- Risk
- Performance
- Cubes
The Challenge / Benefit

- **The Challenges:**
  - Cost
  - Change Management
  - Organizational Alignment

- **The Benefits:**
  - Business agility and integrated data
  - Efficient operations that are ‘less risky’
  - Improved decision making
  - Supports future growth and risk reduction
Effective Risk Management

Operational Excellence is a program that also supports Teachers’ risk appetite (risk / reward) objectives.

ENTERPRISE RISK

- Investment
- Governance
- Operational
- Strategic
- Reputational

New Risk System
Established Data Quality & Data Governance Program
Mitigating Control & Processing Risk
Informing Long Term Strategy
Reducing Likelihood & Impact of Incidents

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Back Up Slides
Agenda

- About Teachers’
- The Need – You Can’t Manage What You Can’t Measure
- The Journey
- Operational Excellence
- The Data Challenge
- The Challenges / Benefits
- Measuring Success
- Conclusion
Data Challenge

Data Sources

Data Consumers
Measuring Success

Risk Model Heat Map has been developed to:

- Measure relative risk associated with each model
- Measure the relative overall quality of the portfolio of models
Conclusion

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