



# ERM & Operational Risk

A Suggested Technology Frame-work

Sanjay Nene

Ramkumar Kothandaraman

M.M.Shyam Sankar Kartik

# Agenda

---

- Enterprise Risk Management (ERM)
  - Background
  - Implementation
- Operational Risk (OR)
  - Business Functions
  - Challenges and Opportunities
- Technology Challenges and Solutions for ERM and OR
- Conclusion



# Enterprise Risk Management

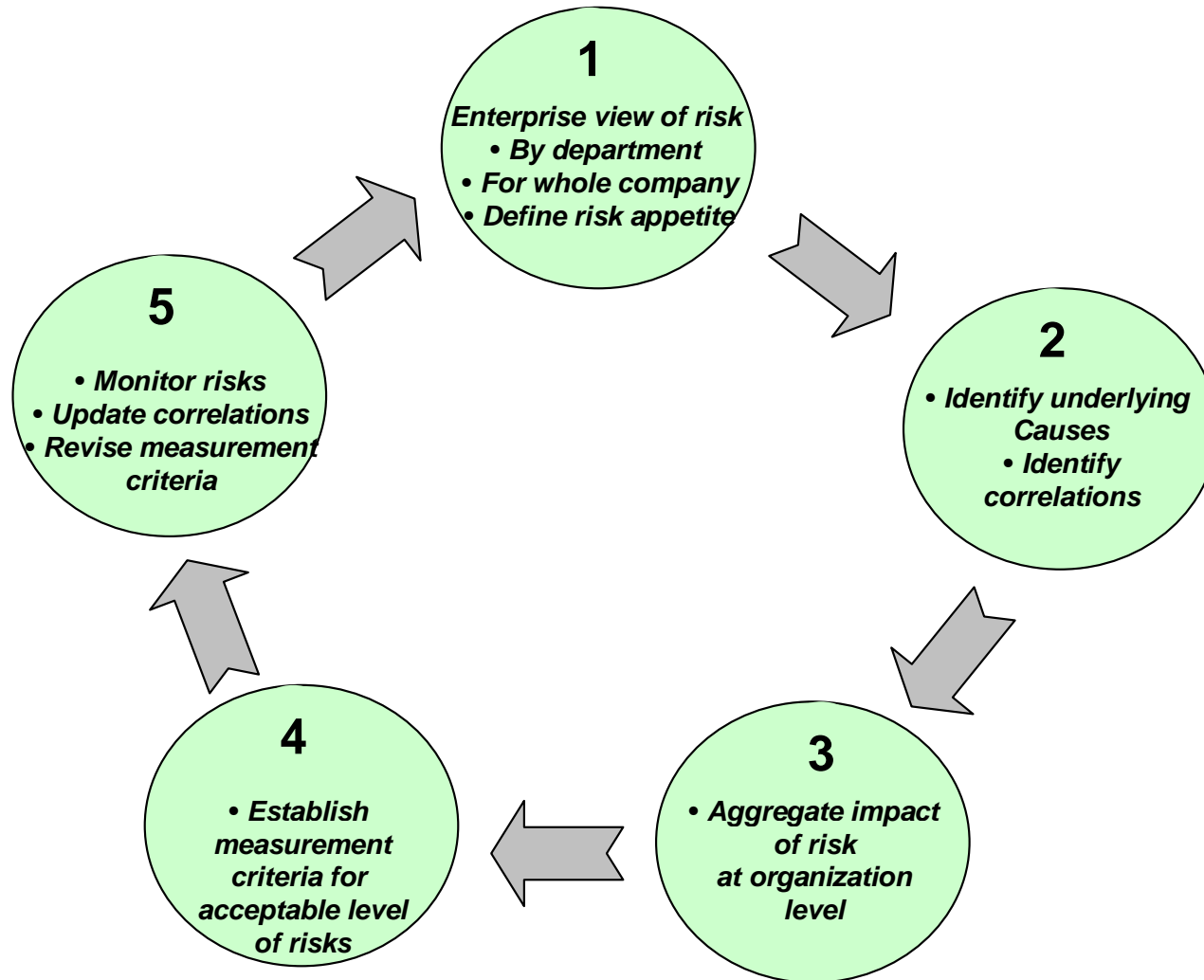
# Pre-ERM Risk Management Approach

---

- Interplay of risks: Did not account for correlation between risks affecting different departments
- Not enough root cause analysis: Resulting in inefficient and inadequate solutions
- Incorrect prioritisation of risks

***The key objective of ERM is to develop a coherent enterprise wide strategy enabling an organization to address risks effectively in a holistic manner, while making optimum use of the resources.***

# ERM implementation





# Operational Risk

# Business Functions

## ***Operational Risk:***

***The risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events***

- Actuarial Functions
- Underwriting
- Claims
- IT systems
- Sales and Marketing

- 
- **Standardization**
  - **Outsourcing**
  - **Business Continuity**

# Components of Operational Risk





# Challenges in Operational Risk Management

- Operational risk is not very precise and covers a wide scope.
- Lack of industry standard definition and differing classifications of risk lead to custom Operational risk Management strategy for each organisation
- Identification of risks in day to day activities
  - people risk, agent risk, third party vendor risk, systems risk, legal risk, claims risk, client relationship
- Defining criteria for prioritizing the impact of the risk on the business - High frequency & low impact or low frequency and high impact risk?
- Quantifying the risk - How does one quantify risks like fraud done by agents in new business – misrepresentation, mis-selling, mismanagement, etc.
- Loss data relating to operational risks have not been collated in a way that allows for comparison, trends analysis or model creation.

# Benefits of Operational Risk Management

- Optimal capital allocation – In the future insurer capital allocation could be tremendously affected by operational risk. Indiscreet or imprudent business practices would require more capital allocation
- Culture of accountability – Incorporating operational risk into an organization DNA would improve the culture of accountability in an insurance organization.
- Avoid potential loss – Potential future losses could be avoided with incorporation of operational risk practices into the organization
- Improved performance – Since risk management is at the core of an insurer, better operational risk management could improve business performance as well.



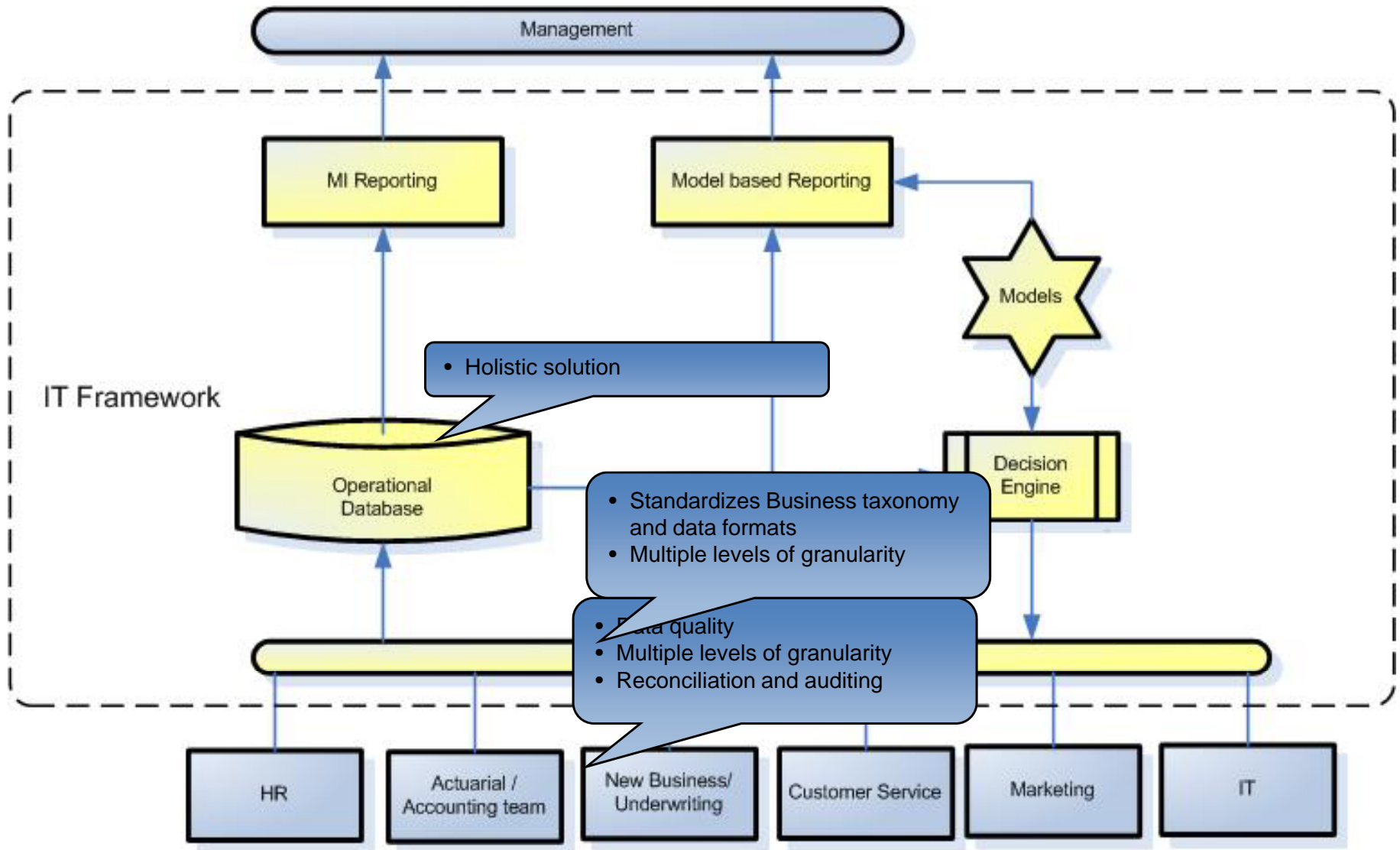
# Technology Challenges and Solutions for ERM / OR

# Technology Challenges

---

- Business Taxonomy & data formats
- Data quality
- Multiple levels of granularity
- Intermediate vs Holistic solution
- Reconciliation and auditing

# Technology Solution





# Conclusion

# ERM / OR in Insurance - Conclusions

---

- Compliance related initiatives are set to increase
- Need long term strategy instead of short term fixes / solutions
- Need for technology transformation



# Thank You!

Sanjay Nene  
Ramkumar Kothandaraman  
M.M.Shyam Sankar Kartik