Demystifying the ERM implementation requirements for success

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With you today..

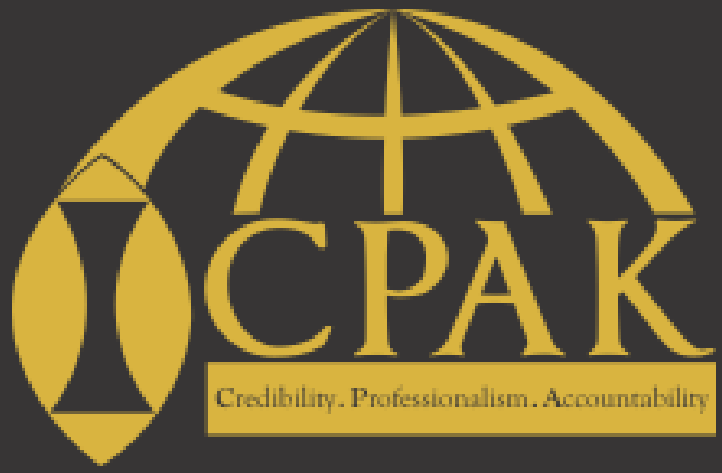
A manager at KPMG Advisory Services with over 8 years of experience in providing enterprise wide and financial risks advisory services and solutions. Providing executive and staff trainings, risk function transformation projects, risk management gap analysis, risk maturity assessments, development and implementation of risk strategies and appetite statements, risk frameworks, risk assessment and quantification, stress and scenario analysis, risk monitoring and reporting.

Qualifications and associations:

- Accredited trainer, GARP, CPA, Actuarial science postgrad, PRINCE 2 Practitioner

What we will cover in this session

- **Risk modelling and analytics :** Why this is the current and the next big thing?
    - Approaches and tools for risk assessment
    - Risk modelling for effective risk quantification
    - Importance of risk modelling and analytics



Introduction

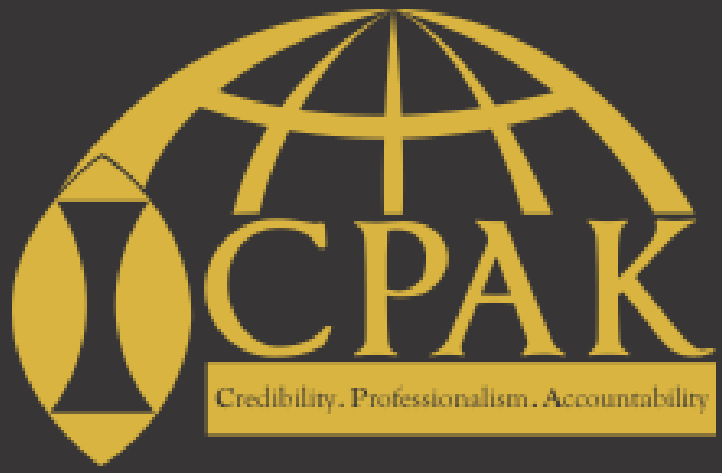
Introduction

"We have so far learnt various components of the foundation, execution and today shall be kicking of with the analytical facets of ERM including..

- Introduction to Enterprise Risk Management (ERM)
- Developing the ERM Framework
- The Risk Management Process
- Risk Appetite
- Risk Governance

These forms the center stage for risk analytics and modelling

…Why?How??



Risk modelling and analytics

Risk modelling and analytics definitions

Risk analytics 1

Risk analytics is a form of business intelligence that is currently being adopted to optimize decision making in the risk management environment. Done via either digital solutions, manual or semi-automated techniques. Use data from various risk events/categories, come up with potential scenarios for a more effective enterprise – wide assessment. Facilitates preparedness and precision in decision making by management.

For risk analytics requires a risk management process, structure and procedures in place, the right culture, a data management system for data quality

Many organizations use historical data to visualize risks and their causes – descriptive analytics. However, prudent risk functions are required to utilize predictive analytics to be more effective and dynamic

Risk modelling and analytics definitions

Risk modelling 2

Risk modeling is a mathematical representation of risk and its causative factors in a statistical relationship. Helps to model various scenarios determined during the risk analytics stage to bring life to this scenarios and the real context for the business.

Risk modeling helps organizations to identify, analyze, and mitigate risks so they are prepared to deal with them should they occur

Important factors while performing RM & A

Effective risk modelling and analytics should consider at least the following

1. **Targeted modelling:** – Specific to the needs of a company and not off the shelf solutions
2. **Sustainability** : independent on a person and flexible for future improvement
3. **Governance**: Robust accountability on model performance and results
4. **Analytics and insights**: Produce insights for decision making
5. **Data:** Amount and availability of data informs complexity of models

How to get started

Don't be a jack of all trades .....

Ask the right questions

Which areas are critical? People, Clients?

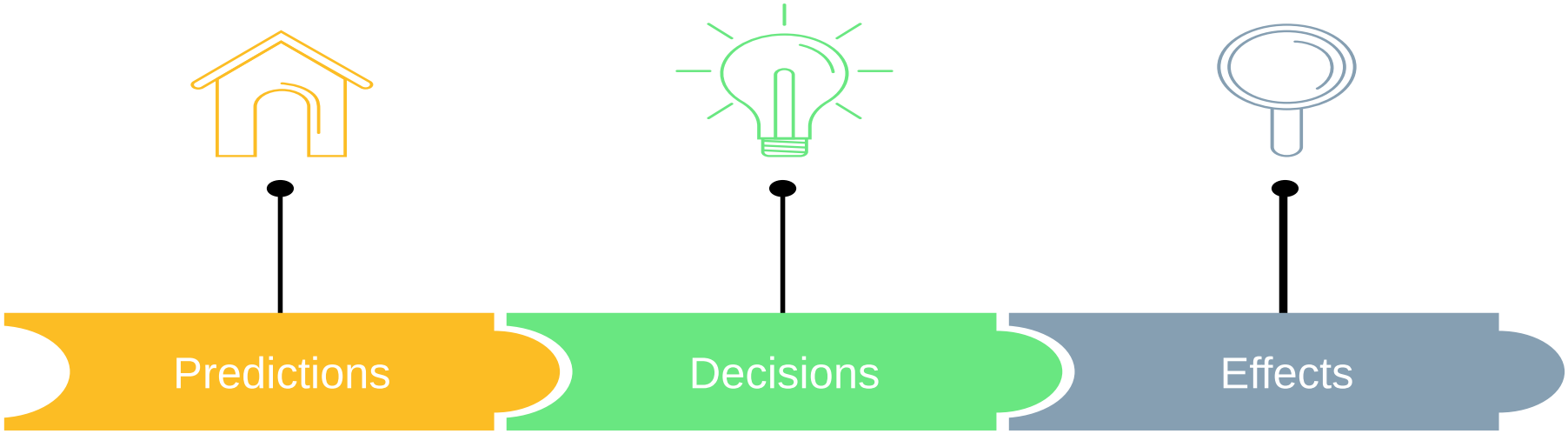
Independencies

Understand cross functional insights

Establish effective programs

Use risk information to make informed decisions / take actions

Maturity should look like this



Risk analytics should answer the following:

- What will happen?
- When will it happen?
- Why would it happen?

How do we benefit from these insights?
What should change?

How will these decisions impact everything else?

PREDICTIVE ANALYTICS

PRESCRIPTIVE ANALYTICS

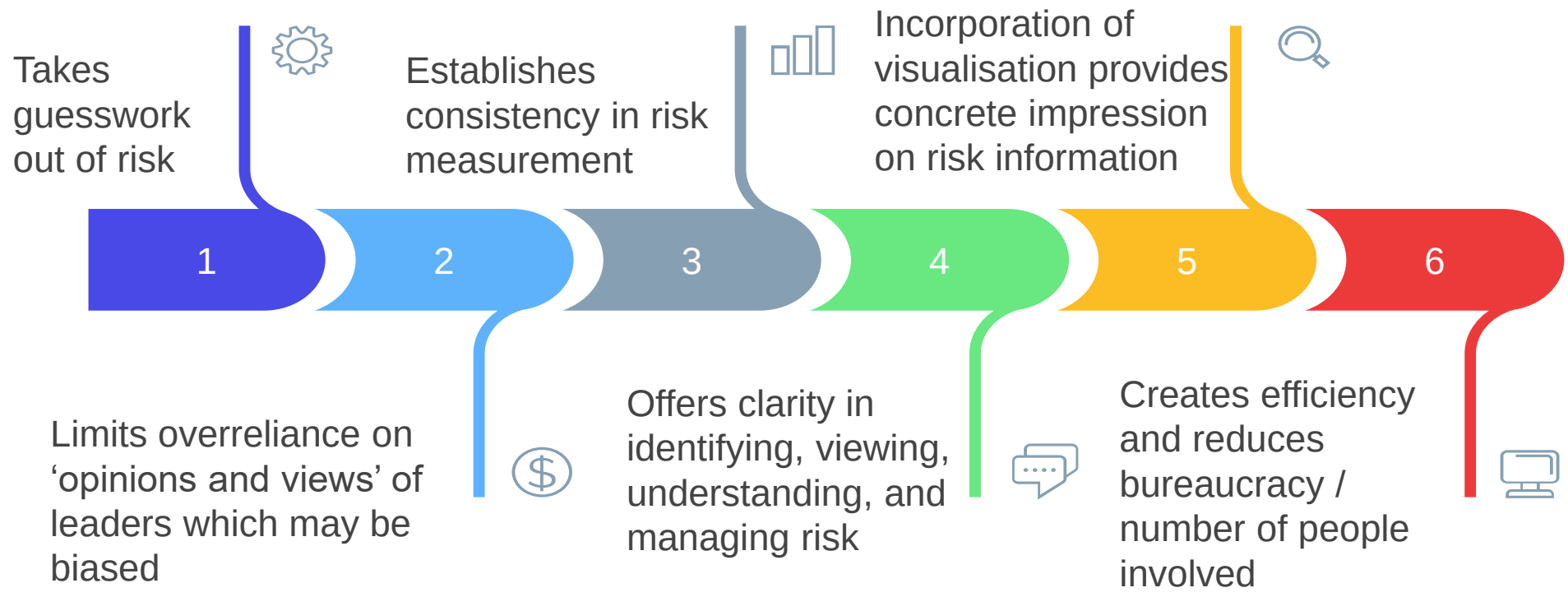
Approaches and tools for risk assessment

Risk assessment…

- is the identification and analysis of risks to the achievement of business objectives
- forms a basis for determining how risks should be managed
- allows an entity to understand the extent to which potential events might impact objectives
- entails classifying risks from two perspectives
  - ✓ likelihood of an event occurring (including the number of times)
  - ✓ consequences or impact of the events occurring (including the cost).

Importance of risk modeling and analytics

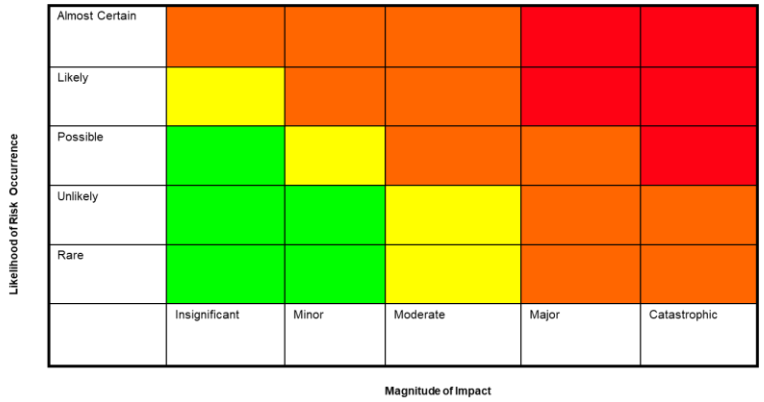
Importance of risk modeling and analytics



Risk modelling for effective risk quantification

Have the requisite risk management framework, a robust data management system for an effective data analysis process, a working risk governance system, the outcome of modelling done by the right team enhances results of risk quantification:

Promotes a cost effective RM process, cost and resource optimization, reduced time wastage in planning and action plans, optimal allocation of resources during planning and budgeting and implementation of controls…etc



Wrap up

Thank you