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A SOUTH AFRICAN PERSPECTIVE ON OPERATIONAL RISK IN INSURANCE COMPANIES

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Agenda

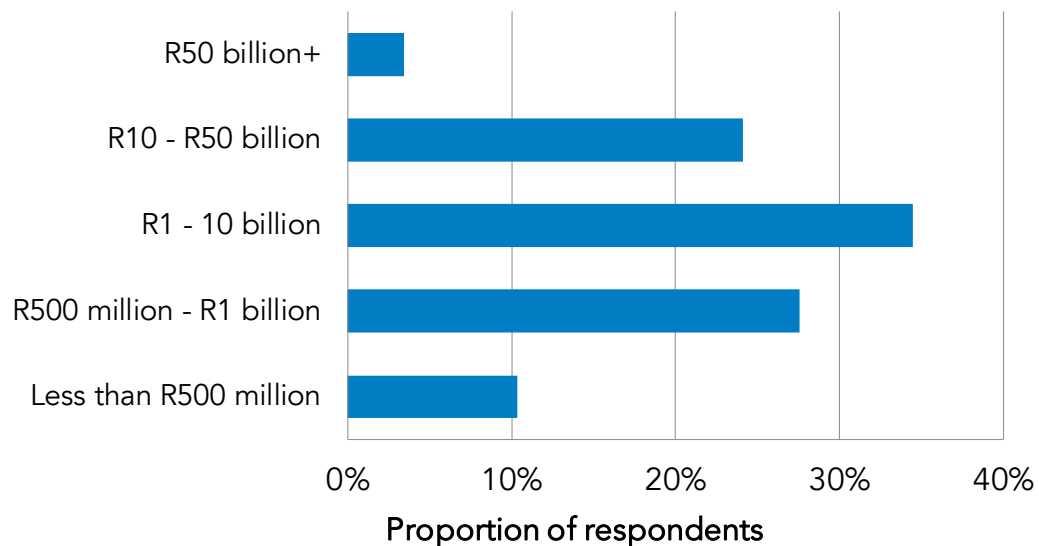
- 🌀 Introduction
- 🌀 Recognition of Operational Risk in South Africa
- 🌀 Operational Loss Data as a Potential Solution
- 🌀 Conclusion
- 🌀 Questions



Introduction

- ❧ Solvency Assessment and Management (*SAM*) is the driver of *developments* in operational risk management
- ❧ Pillar I Solvency Capital Requirements (SCR) include an explicit operational risk *capital charge*
- ❧ Pillar II Own Risk and Solvency Assessment (ORSA) *holistic assessment* and pricing of all material, foreseeable risks
- ❧ South African insurance industry surveyed to determine the *state of play*

Approximate gross annual premium

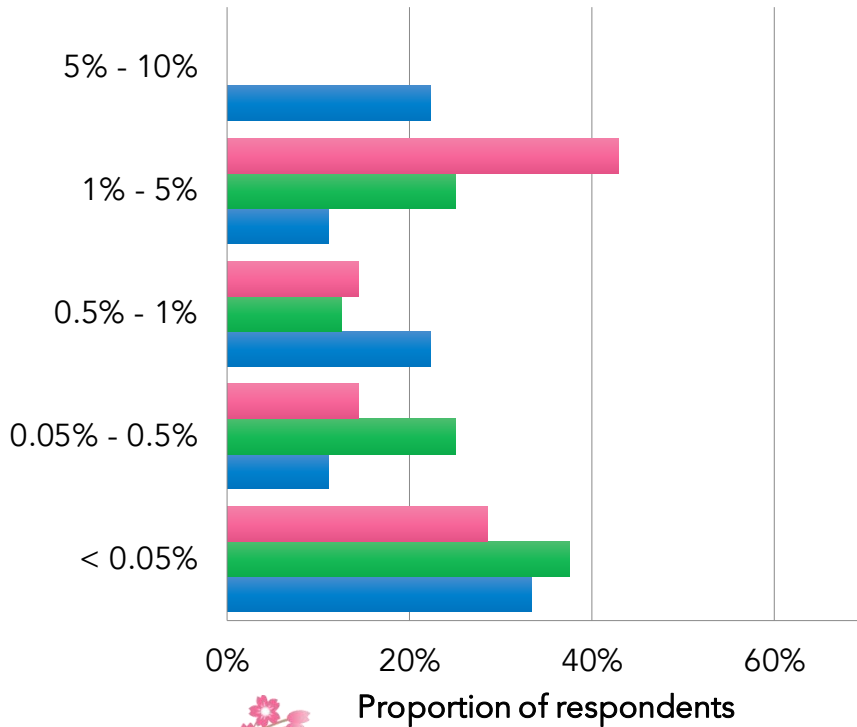


Recognition of Operational Risk in South Africa

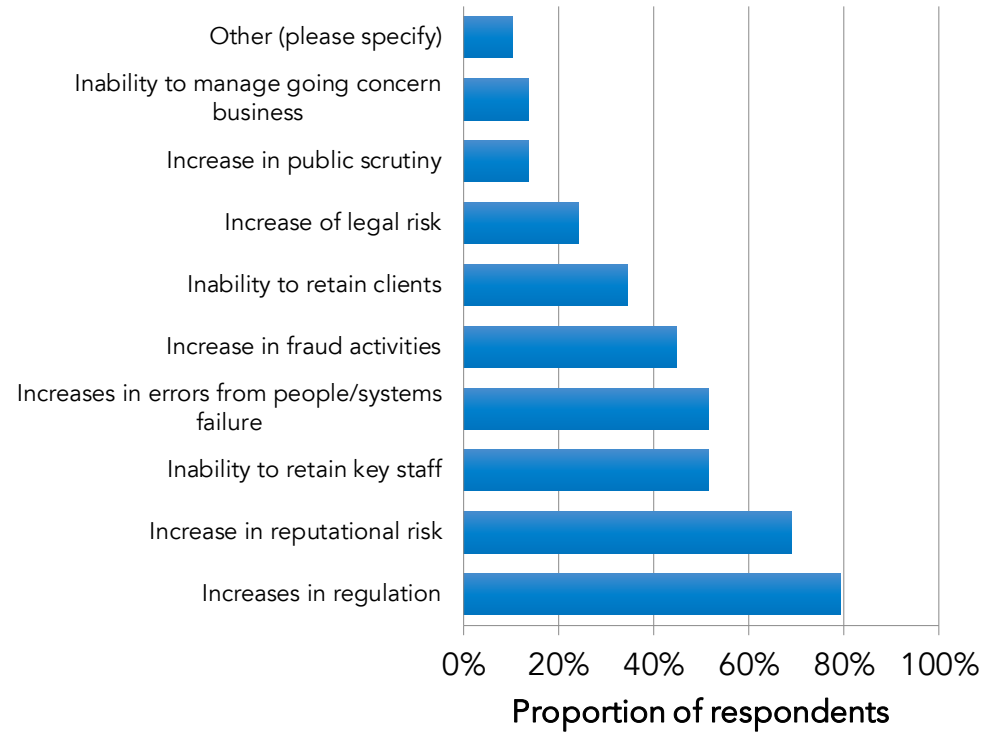


Operational Losses in the South African Insurance Industry

Operational losses as a percentage of net profit



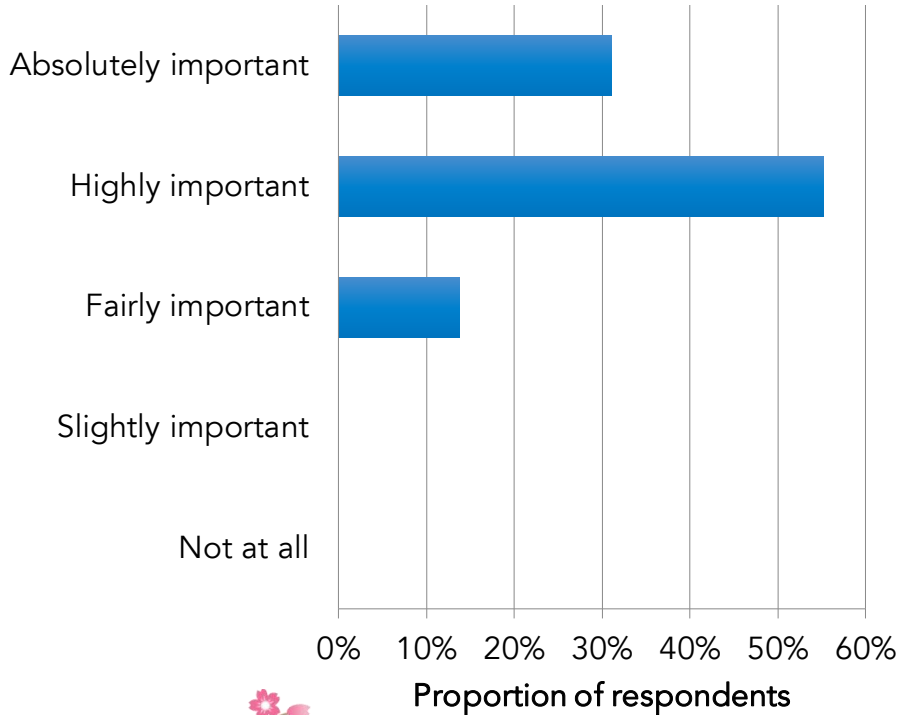
Key operational risk concerns



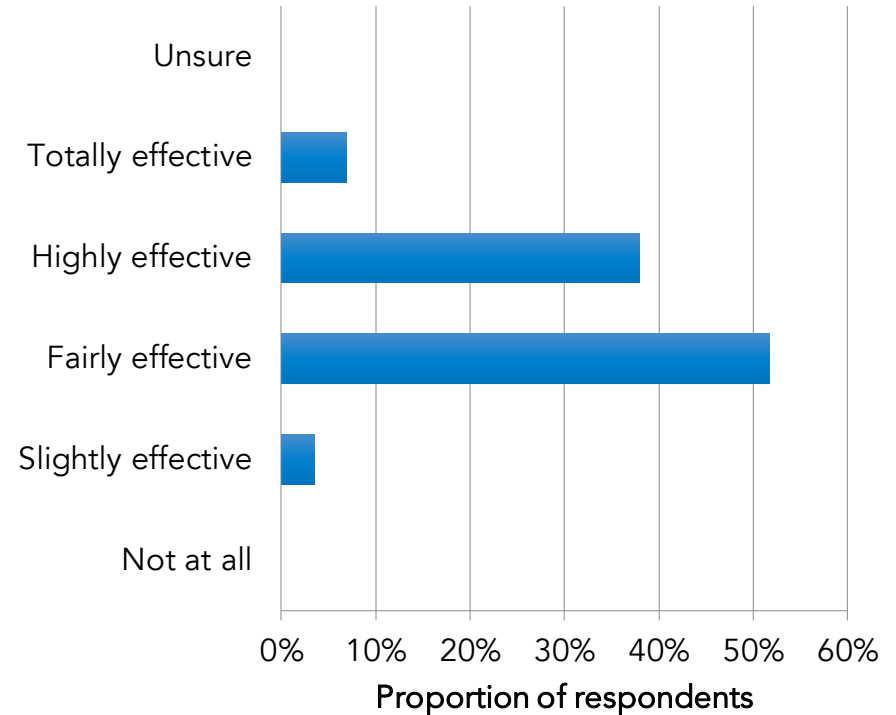
■ R10 bn+
■ R1 - 10 bn
■ < R1 bn

Operational Risk Framework: Risk Management

Importance of sound operational risk management practices



Effectiveness of operational risk management practices

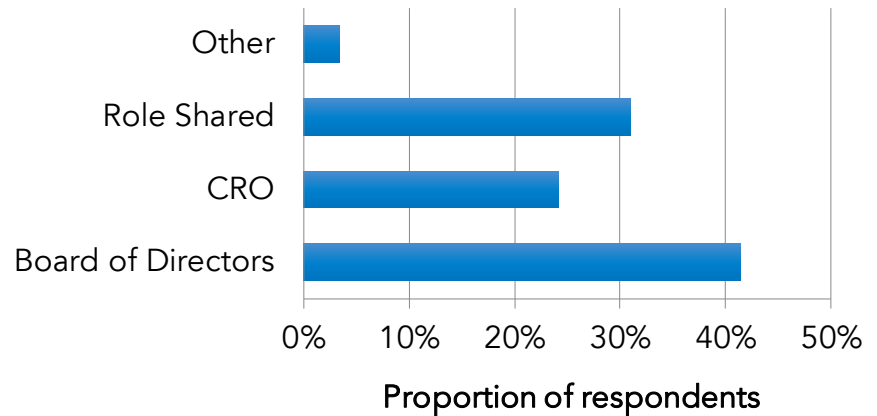


Operational Risk Framework: Organisation

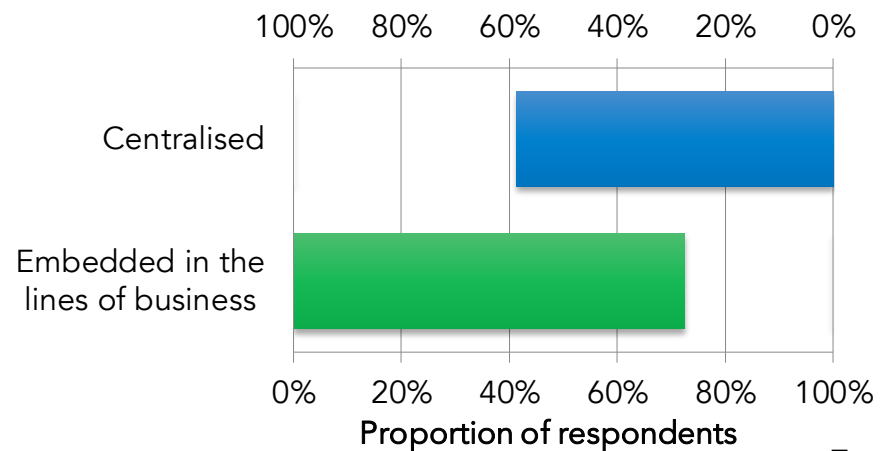
- ultimate *responsibility* for operational risk management:
 - board of directors

- organisation* of risk function
 - centralised
 - embedded approach
 - both recommended

Ownership of responsible for operational risk management

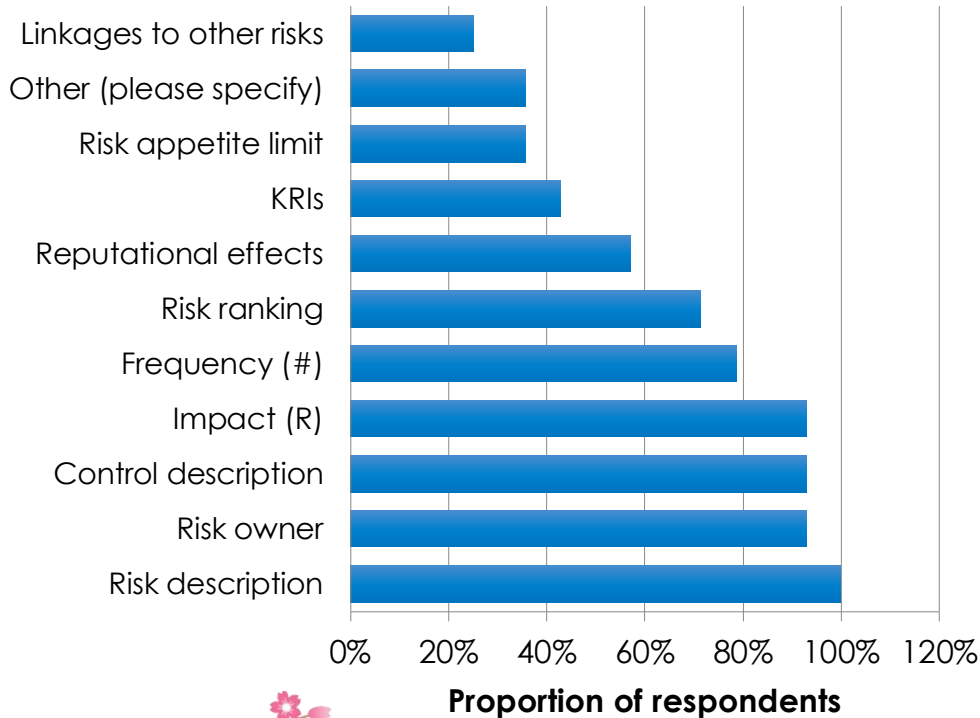


Organisation of operational risk function

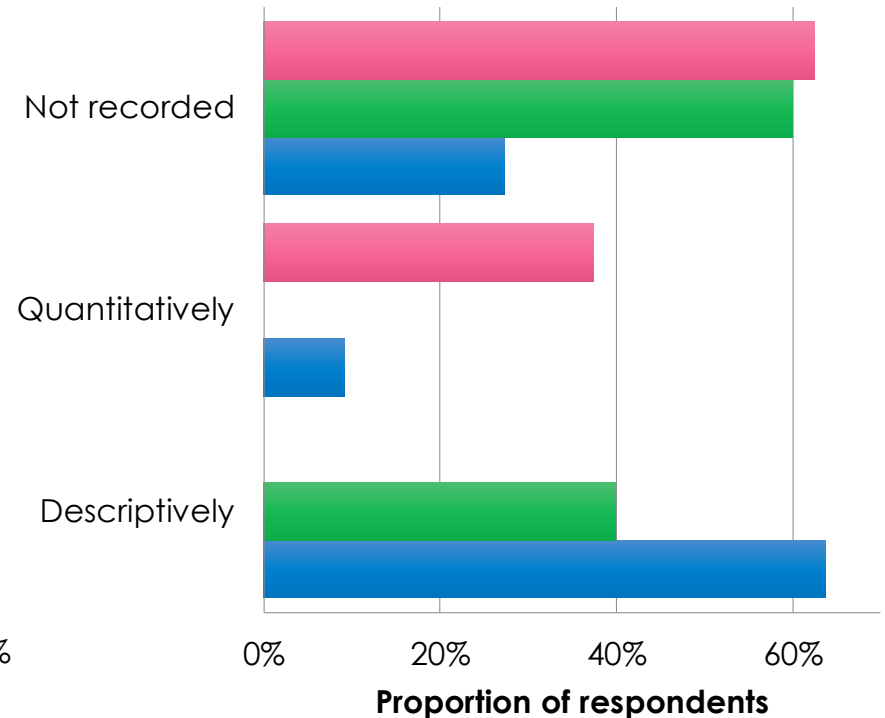


Operational Risk Framework: Risk Identification

Information collected as part of the operational risk assessment



How interrelations between operational risks are captured

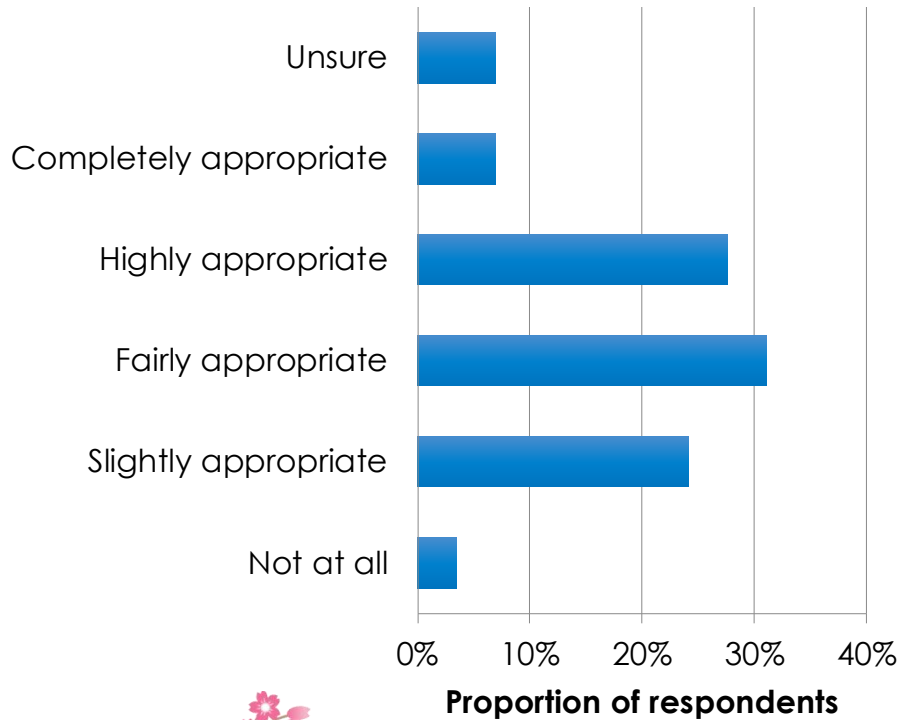


■ R10 bn+
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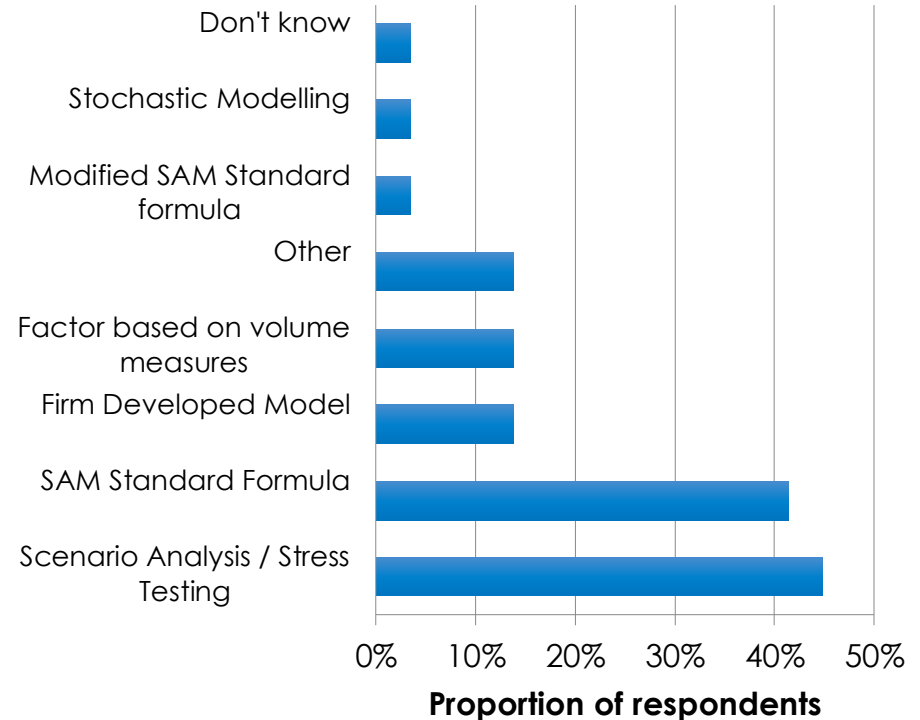


Operational Risk Framework: Risk Assessment

Appropriateness of data-based modelling of operational risk

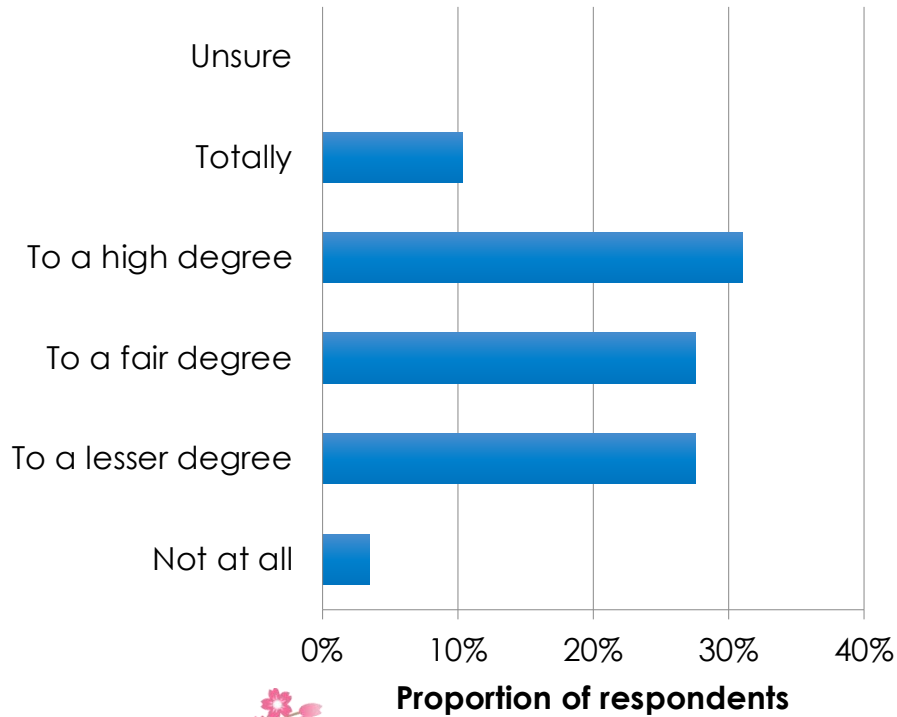


Current methods used for operational risk evaluation

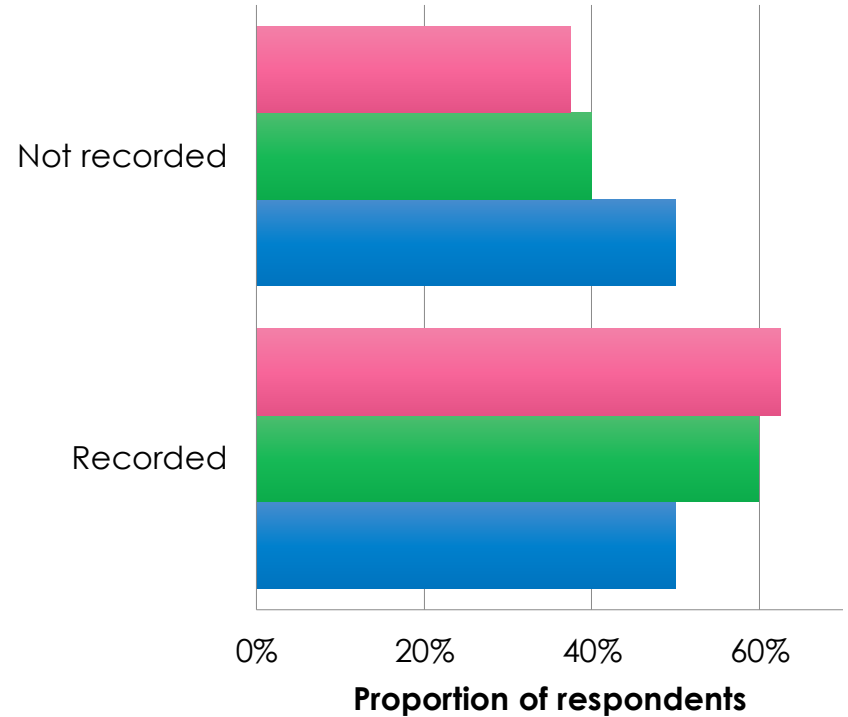


Operational Risk Framework: Risk Data

Degree to which operational risk data is recorded



Recording of near-miss events



- R10 bn+
- R1 - 10 bn
- < R1 bn

Gaps in Current Operational Risk Approach

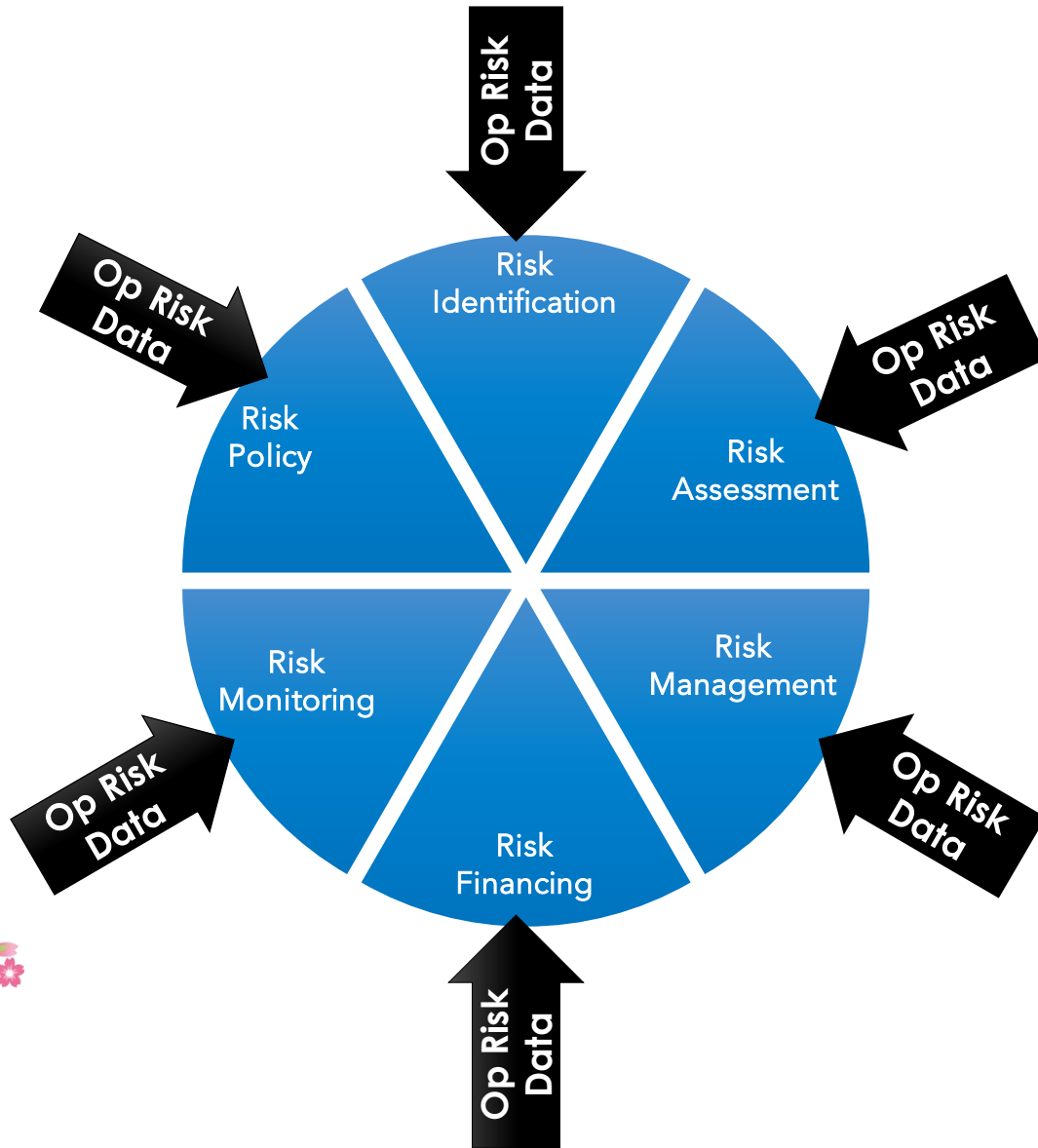
- ❧ approximately 30% of organisations do not have *best practice* risk management *structures* in place
 - Board's ultimate responsibility not established
 - risk functions not embedded within the business
- ❧ *approaches* for identification and quantification of operational risks are *immature* and atomistic
 - Key Risk Indicators (KRI's) not recorded
 - recording of data not adequate or sophisticated
 - modelling approaches simplistic
- ❧ there is a lack of *industry* operational risk *support* for firms
 - no industry-wide operational risk initiatives exist in South Africa
 - regulation does not necessarily incentivise improved operational risk appreciation



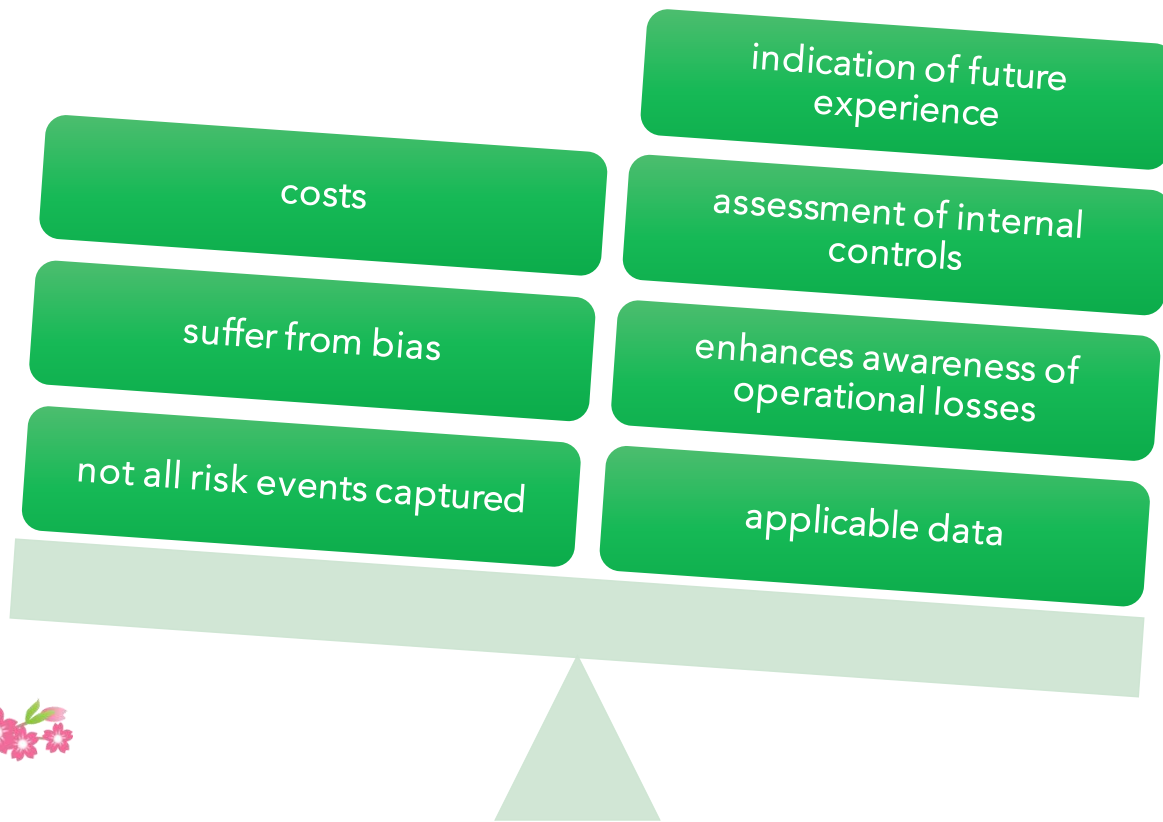
Operational Loss Data as a Potential Solution



Where Operational Loss Data can Help



Types of Operational Loss Data: Internal Data



Types of Operational Loss Data: External Data

- ∞ sources of external loss data
 - *publicly*-available losses
 - *commercial* databases using proprietary loss data
 - *consortium*-based loss data
 - ORIC
 - ORX
- ∞ the degree of *confidence* one may place on each source differs
- ∞ *nature* of events differs in consortiums
 - consortium data more *consistent*
 - may include legally *sensitive* events, not available publicly
 - the *threshold* for recording losses lower



Types of Operational Loss Data: External Data



Limitations

Benefits

recording threshold too high

data from other firms may be too different

may represent culture of largest member

incentive to enhance processes

provides applicable benchmark

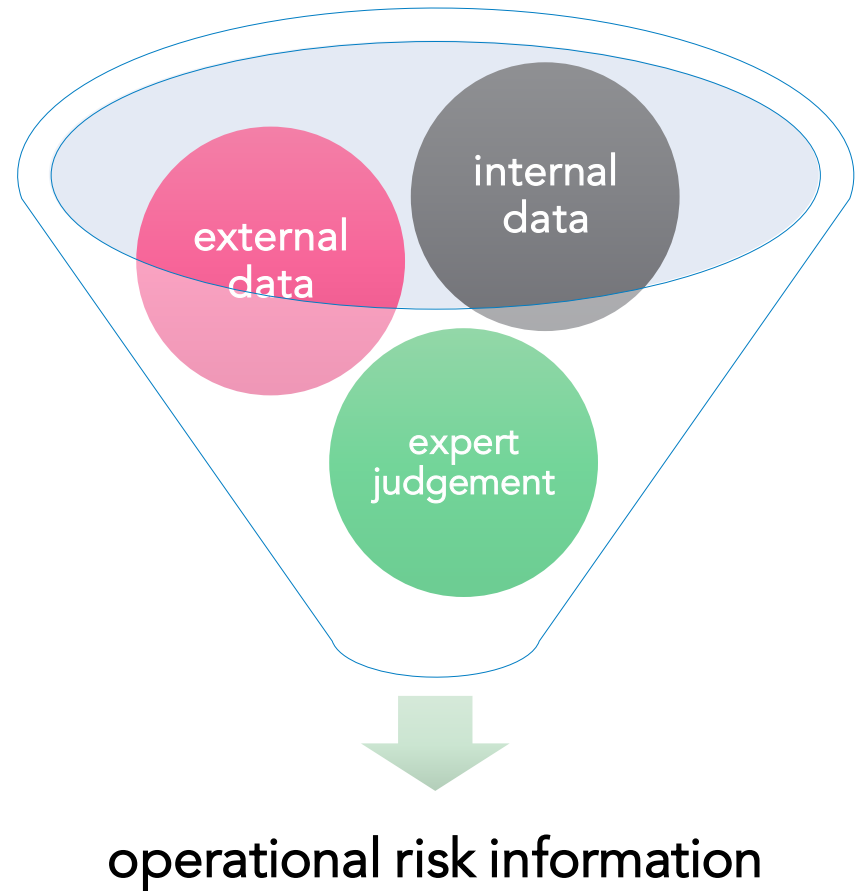
greater info at extremes

greater volume of data



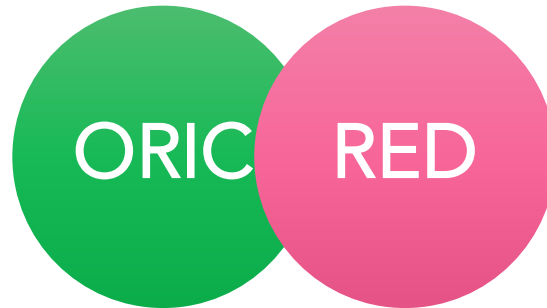
Combining Different Data Types

- careful *scaling* of data needed to avoid bias / unrealistic results
- internal and external loss data should be combined with expert judgement to ensure the most *complete* view



Using Operational Risk Consortia to Supplement Data

∞ two possibilities

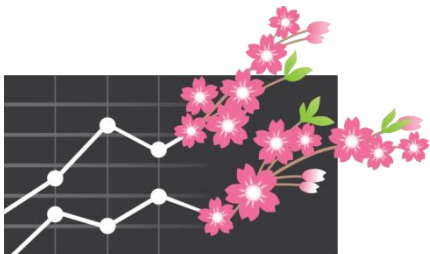


∞ Operational Risk Consortium (ORIC)

- founded in 2004 by the Association of British Insurers (ABI) (UK)
- 31 members
- losses above **£10 000 (R181 500)** recorded

∞ Risk Event Database (RED)

- proposed by the South African Insurance Association (SAIA)
 - would aim to be a South African equivalent of ORIC
 - idea never fully pursued



Using Operational Risk Consortia to Supplement Data: ORIC

Operational Risk Consortium (ORIC)

Benefits

- *enhanced* data from UK members
- modelling *support*

Concerns

- data may not be *comparable*
- the reporting *threshold* may be too high for South African conditions
- *costs* may be prohibitive



Using Operational Risk Consortia to Supplement Data: RED

Risk Event Database (RED)

Advantages

- good-quality, *relevant*, unbiased data
- identification of *trends* in risks
- provision of a *benchmark*
- *enhances* internal operational risk processes
- provision of *key inputs* for scenario discussions

Challenges

- *costs* of joining / subscribing
- *relevance* of shared data amongst insurers
- *time* needed before the database is of a meaningful size
- current operational loss data recording *standards* inadequate
- *ownership* and management



Using Operational Risk Consortia to Supplement Data: RED



feasibility

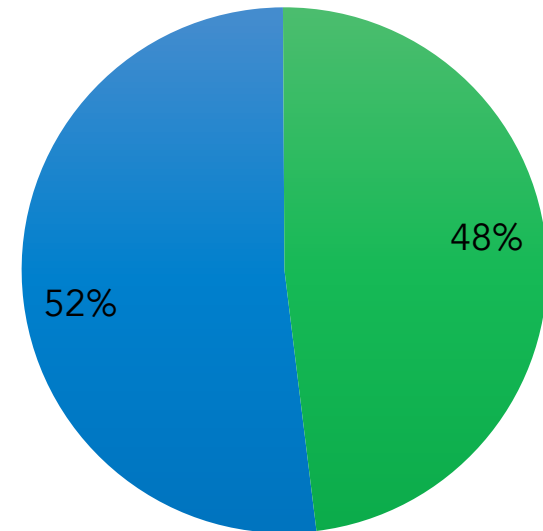
- 52% of respondents believe it feasible
- should be considered bearing in mind the *consequences* of failing to implement proper initiatives now
- willingness of industry to join promising



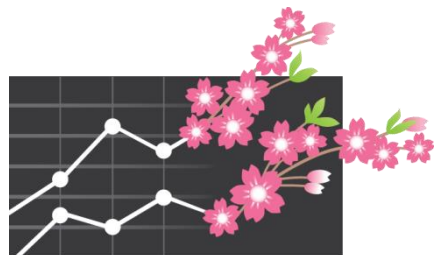
practicalities

- choice of administrator
- regulatory position
- interim preparations
- costs

Feasibility of an operational-loss consortium

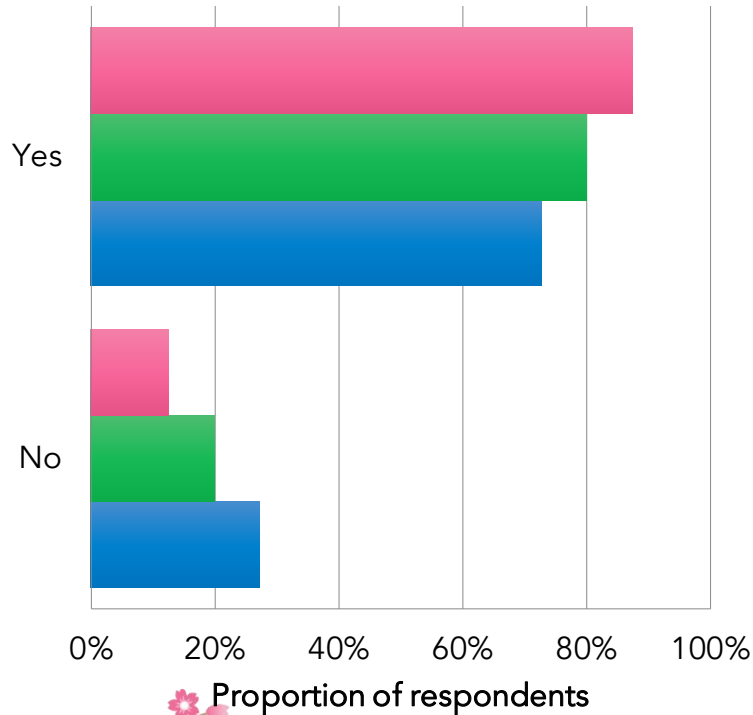


■ Feasible ■ Not feasible

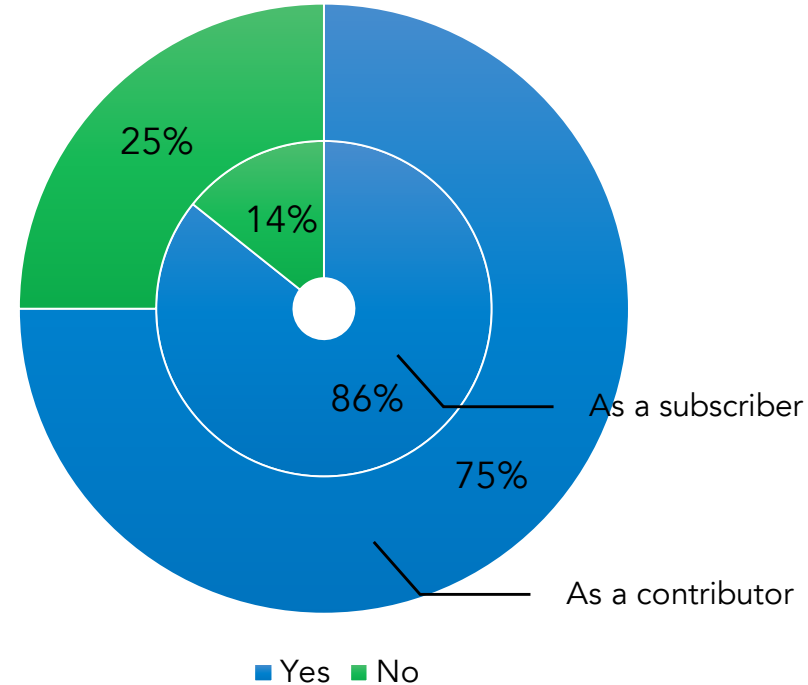


Industry Opinion of an Operational Risk Consortium

Willingness to be involved in an operational risk consortium



Willingness to join an operational risk consortium (subscriber vs. contributor)



- R10 bn+
- R1 - 10 bn
- < R1 bn

Conclusion

- ❧ operational risks are very *significant* to South African insurers
 - realise its importance and have begun to develop frameworks
 - wide range of maturities in processes between insurers
- ❧ *regulation* is the main driver of operational risk developments
 - but industry not happy with the approaches for the capital calculations in respect of operational risk
- ❧ operational loss data *essential*
 - current use immature
- ❧ more research required on the *feasibility* of a South African operational risk consortium



more research required on practical operational risk quantification techniques for South African insurers



Questions

➤ Our question to you:

“In your experience, what are the most practical quantitative modelling techniques for operational risks?”

➤ Your questions for us?

