

**TURN RISK APPETITE  
INTO PRACTICAL  
DECISION MAKING  
TOOLS**

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**RISK  
AWARENESS  
WEEK**<sup>2022</sup>



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- ❑ USING RISK APPETITE TO MONITOR RISK EXPOSURES AND ACTIONING STOP LOSSES

# WHAT IS RISK APPETITE

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Risk Appetite is the level of Risk that an organization **considers acceptable to take in pursuit of its strategic objectives in the existing and future environments**, before corrective action is deemed necessary.

It is an integral component of Enterprise Risk Management (ERM)



# WHAT IS RISK APPETITE

In the course of conducting business, every organization is exposed to a variety of risks.

Traditional view of Risk Management  
**Hurdle to creativity & innovation**



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Modern view of Risk Management  
**Business enabler / partner to success**

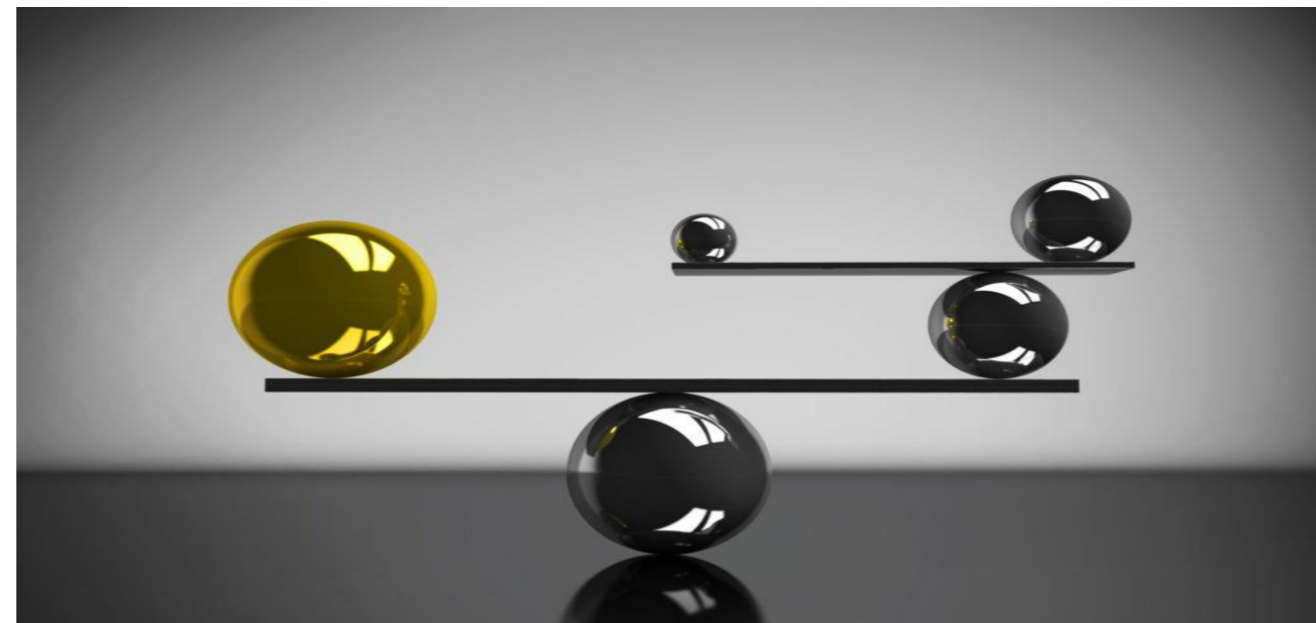


# WHAT IS RISK APPETITE

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## Values & objectives of articulating Risk Appetite

- ❑ Reach a suitable balance between uncontrolled innovation and excessive caution
- ❑ Provide guidance for people on the level of risk permitted and promote uniformity of tactics and vision across an organization
- ❑ By defining acceptable levels of risk, the organization ensures that resources are not drained on further mitigating risks that are already considered within the acceptable level.





# WHAT IS RISK APPETITE

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## Values & objectives of articulating Risk Appetite

- ❑ Establish clear boundaries for overall risk taking & Improve management confidence and discussions regarding the Bank's risk profile
- ❑ Enable unused risk capacity to be identified and thus profitable opportunities to be highlighted



# WHAT IS RISK APPETITE

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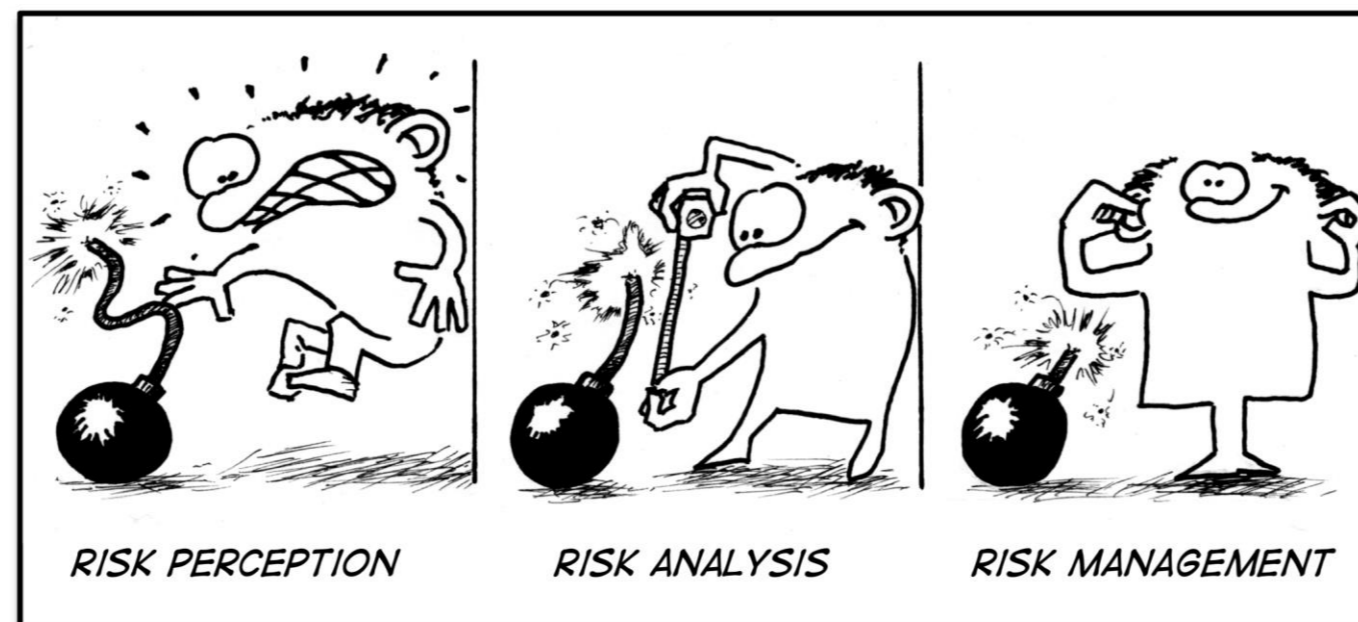
## Translating Risk Appetite into action



# WHAT IS RISK APPETITE

## Translating Risk Appetite into action

- ❑ Risk Appetite works as a framework for decision making
- ❑ The value of Risk Appetite is showcased when it leads to tangible change across the organization
- ❑ Communication is of vital importance
- ❑ Senior Management team should periodically evaluate the decision making against Risk Appetite to ensure conformity between desired outcome and roadmap





# WHAT IS RISK APPETITE

## Risk Appetite should be

- Focused
- Relatively simple in structure
- Actionable
- Measurable
- Easily communicated



# DIMENSIONS ALONG WHICH RISK APPETITE NEEDS TO BE DEFINED

REGULATORY COMPLIANCE

STRATEGY CONFORMISM

SOLVENCY & CAPITAL ADEQUACY

EARNINGS STABILITY

REPUTATIONAL GOODWILL

OTHER NON FINANCIAL GOALS: CUSTOMER SATISFACTION, CORPORATE SOCIAL RESPONSIBILITY OBJECTIVES...

# DIMENSIONS ALONG WHICH RISK APPETITE NEEDS TO BE DEFINED

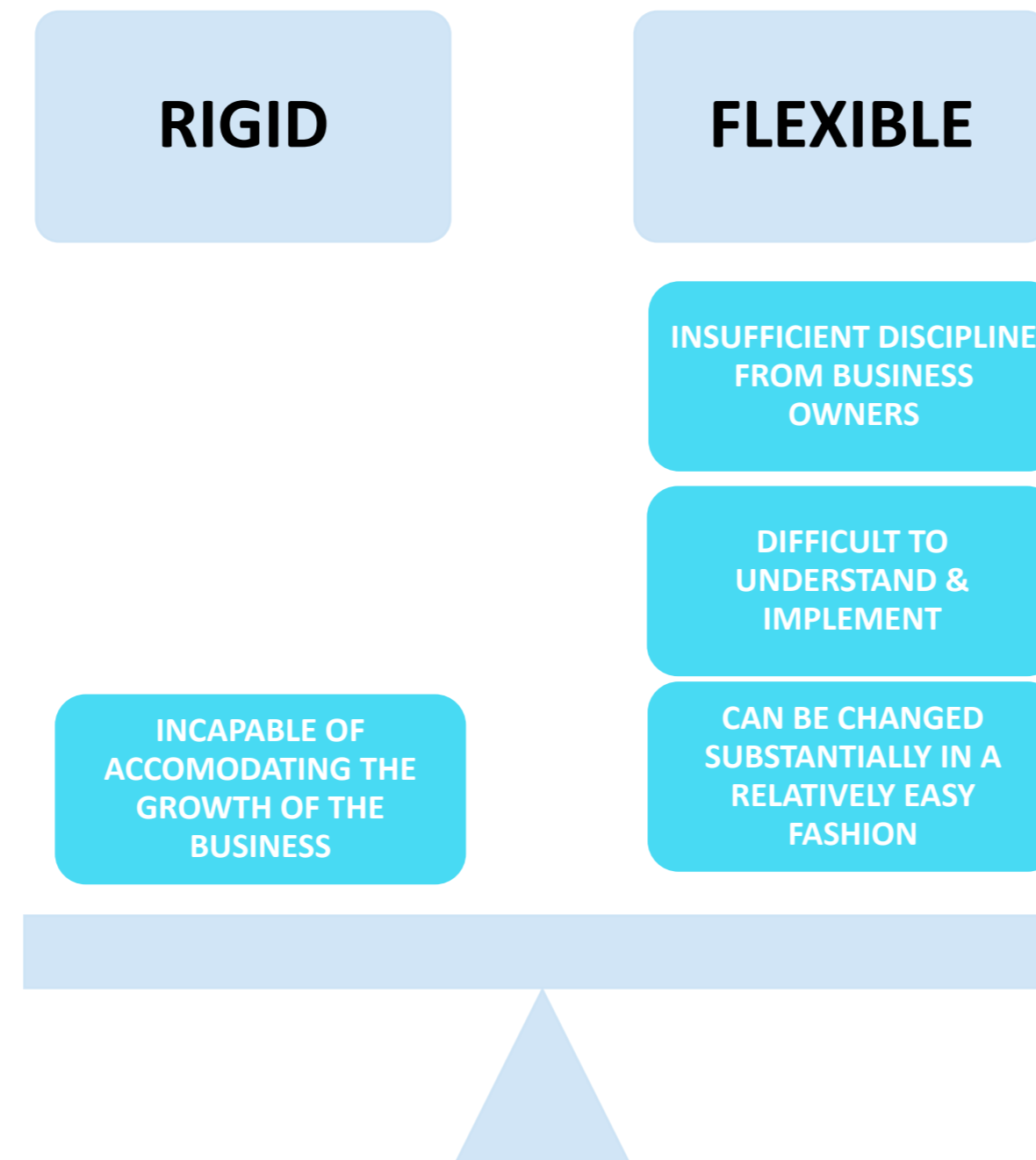
## QUALITATIVE

- General Principles
- List of acceptable products & activities

## QUANTITATIVE

- Key Risk Indicators (KRIs)

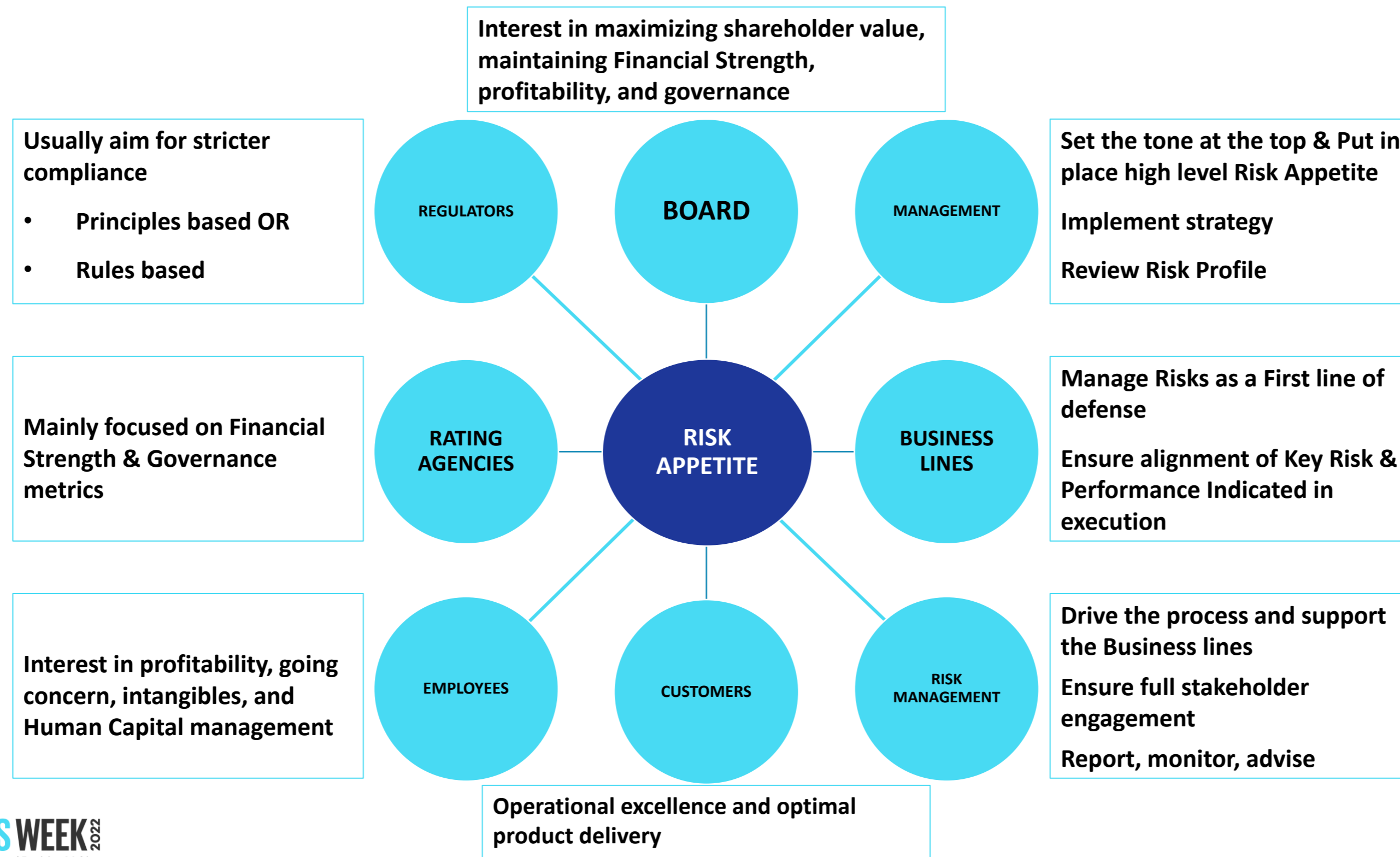
# DIMENSIONS ALONG WHICH RISK APPETITE NEEDS TO BE DEFINED



The right balance between rigidity and flexibility may well shape the success or the failure of the framework, and requires careful judgement, as well as complete alignment and engagement from Board and senior management

# DIMENSIONS ALONG WHICH RISK APPETITE NEEDS TO BE DEFINED

Developing & maintaining a Risk Appetite framework is not only a Risk Management project. Many stakeholders have a vested interest in the setup, execution & calibration of this process.





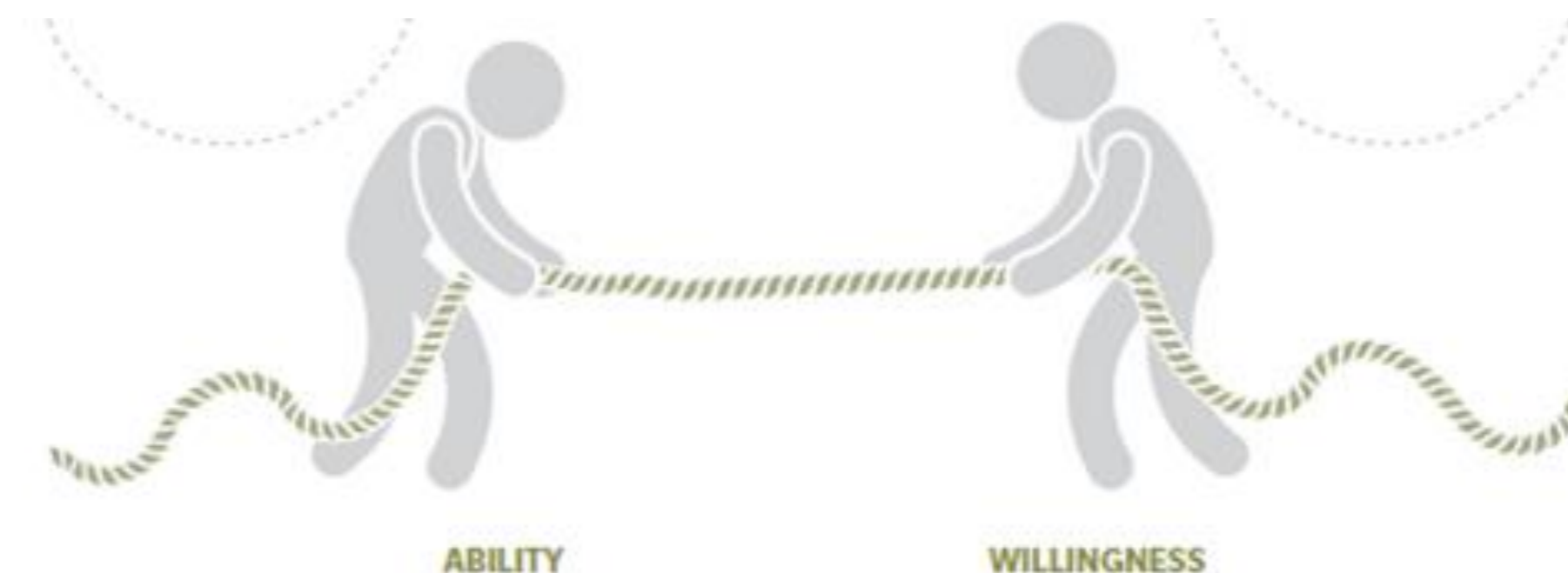
# USING QUANTITATIVE ANALYSIS TO SETTING LIMITS & EARLY WARNING SYSTEMS

- **Risk Appetite**

The amount of risk the organization is willing to accept to achieve its strategic objectives. It is quantified and determined through a target around which the organization is comfortable to operate

- **Risk Tolerance**

The amount of risk the organization can accept in the conduct of business. It is related to the acceptance of the outcomes of a risk should they occur, and having the right resources and controls in place to absorb or “tolerate” the given risk. It acts as a buffer zone providing management with time to react before a breach of internal or regulatory limit occurs up until an escalation is warranted



# USING QUANTITATIVE ANALYSIS TO SETTING LIMITS & EARLY WARNING SYSTEMS

- **Risk Thresholds**

Limits that cannot be breached and to which immediate corrective action needs to be undertaken



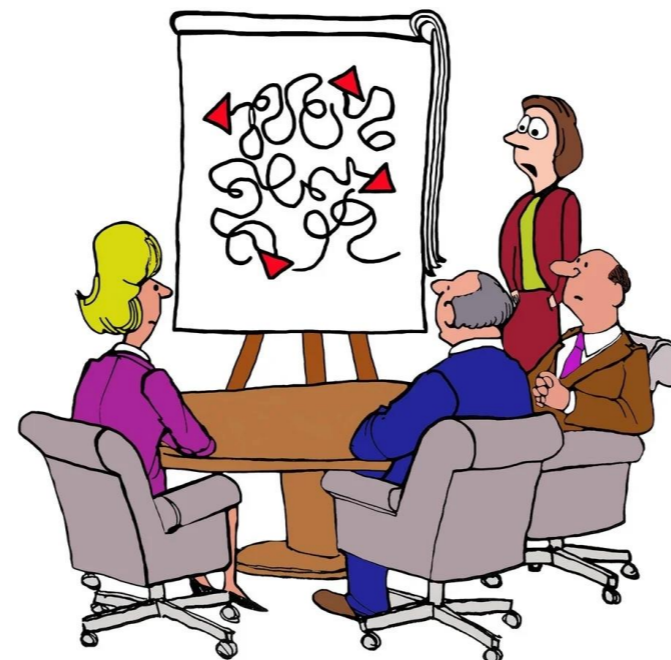
# USING QUANTITATIVE ANALYSIS TO SETTING LIMITS & EARLY WARNING SYSTEMS



## Step 1: Identify Strategic goals & objectives

### Assess Status Quo

- Historical Business model & risk profile
- Historical disruptive events / losses and the organization's response
- Current risk capacity
- Existing policies and limits structure
- Board risk oversight
- The organization's values
- Risk culture



"The way forward is clear."

### Translate to strategic vision

- Target Business model and strategic objectives
- Target Business mix
- Ability to withstand Stress tests
- Investors expectations
- Discussions and interviews with key executives and directors
- Competitor business model alignment / divergence

# USING QUANTITATIVE ANALYSIS TO SETTING LIMITS & EARLY WARNING SYSTEMS



## Step 1: Identify Strategic goals & objectives

### Assess Status Quo

- Current Loan to Deposit Ratio
- Current exposure to real estate sector
- Current concentration by country
- Current Capital Adequacy Ratio
- Current Short Term Liquidity
- Losses related to Operational Risk
- Losses related to Cyber security
- ...



### Translate to strategic vision

- Increase exposure to growth sectors
- Decrease exposure to cyclical sectors
- Increase investments and control loans growth
- Increase guarantee coverage
- Increase cybersecurity resilience
- Increase automation in Operations
- ...



# USING QUANTITATIVE ANALYSIS TO SETTING LIMITS & EARLY WARNING SYSTEMS



## Step 2: Formulate Risk Appetite statement

RISK APPETITE	AVERSE	CAUTIOUS	GROWTH	AGRESSIVE
<b>RISK TAKING PHILOSOPHY</b>	Avoidance of risk is a core objective	Preference for safe execution	Tolerance to accept strongly justified risks	Tolerance to accept justified risks
<b>WILLINGNESS TO ACCEPT UNCERTAINTY</b>	Extremely Low amount of uncertainty tolerated	Limited amount of uncertainty tolerated	Some uncertainty is expected	Uncertainty is expected and accepted as part of the game
<b>WILLINGNESS TO SELECT OPTIONS WITH VALUE AT RISK (VaR)</b>	Choice of options with lowest VaR	Limited choice of options with high Reward to Risk ratio	Options with moderate VaR are acceptable but mitigation is preferable	Acceptable options are ones with high return even with a potential for failure
<b>WILLINGNESS TO TRADE OFF RISK WITH SUPERIOR SUCCESS METRICS</b>	Not acceptable	Preference to avoid trade offs	Acceptable under the right conditions	Acceptable and willing



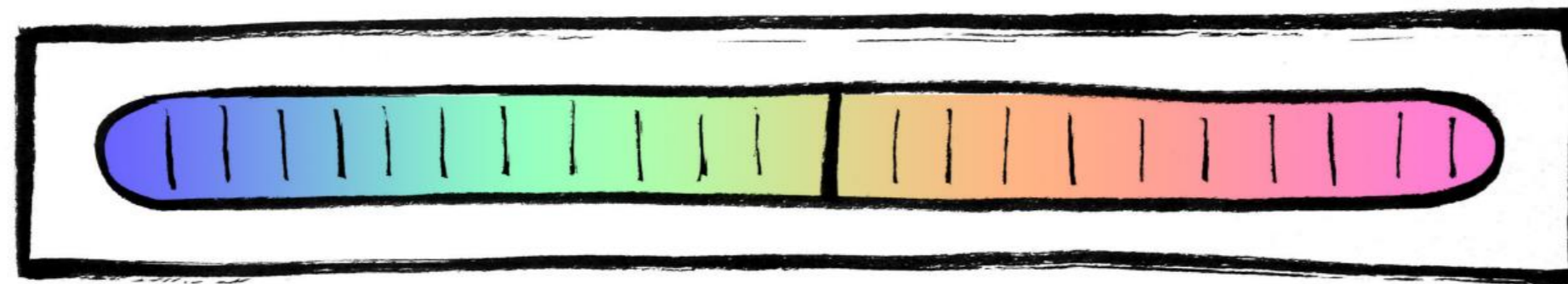
# USING QUANTITATIVE ANALYSIS TO SETTING LIMITS & EARLY WARNING SYSTEMS



## Step 2: Formulate Risk Appetite statement

Sometimes, Risk Appetite can gravitate within a certain range on the aversion / aggressiveness spectrum: an organization may have an appetite for some types of risk and be averse to others, depending on the context and the potential losses or gains.

WHERE ARE YOU TODAY?



# USING QUANTITATIVE ANALYSIS TO SETTING LIMITS & EARLY WARNING SYSTEMS



## Step 2: Formulate Risk Appetite statement

### Setting limits

Start with high-level (General) metrics that set the tone to the overall framework

#### Capital Adequacy Ratio



#### Liquidity Coverage Ratio



#### Net Stable Funding Ratio



# USING QUANTITATIVE ANALYSIS TO SETTING LIMITS & EARLY WARNING SYSTEMS



## Step 2: Formulate Risk Appetite statement

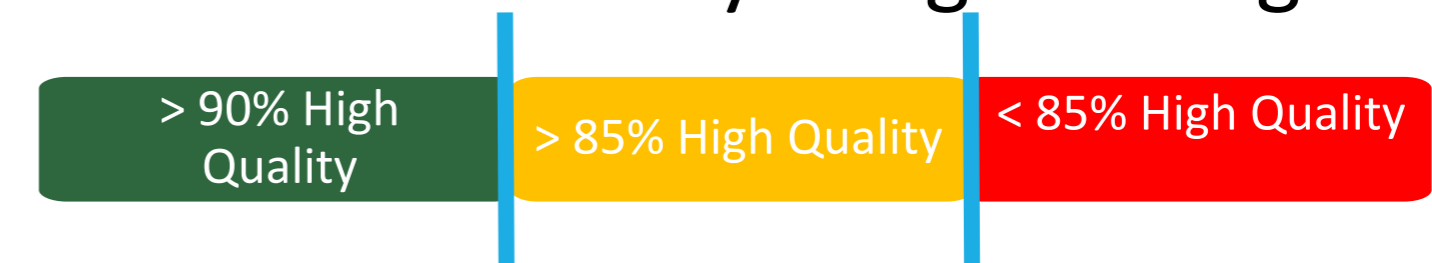
### Setting limits

Then start drilling down by activity / Risk Profile

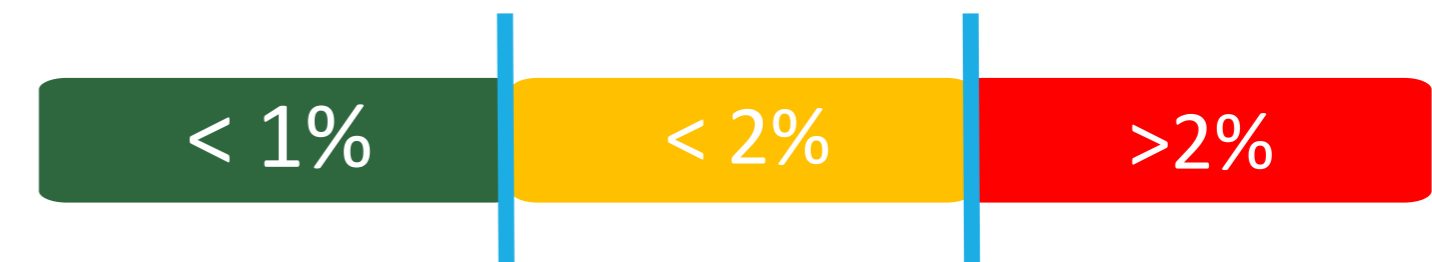
e.g: Credit Risk Appetite

- Distribution by obligor credit rating
- Concentration by country
- Concentration by economic sector
- Concentration by guarantee taken
- ...

### Distribution by obligor rating



### Non Performing Loan Ratio



### Concentration by obligor



# USING QUANTITATIVE ANALYSIS TO SETTING LIMITS & EARLY WARNING SYSTEMS



## Step 2: Formulate Risk Appetite statement

### PROFITABILITY LIMITS

- Long Term Value Creation / Cost of Capital (ROE / RAROC)
- Earnings At Risk (EaR)
- Restrictions in sources of earnings volatility

### REPUTATIONAL GOODWILL

- Number of customer complaints

### INFORMATION SECURITY OF MANAGEMENT SYSTEMS (ISMS)

- Incidents of breaches in Confidentiality
- Incidents of failures in Integrity of Data
- Incidents of non-availability of Data

# USING QUANTITATIVE ANALYSIS TO SETTING LIMITS & EARLY WARNING SYSTEMS



## Step 2: Formulate Risk Appetite statement

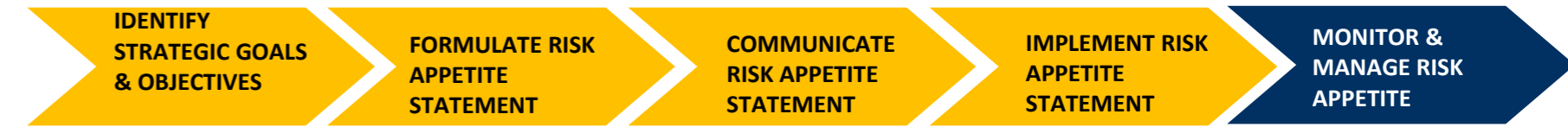
### Operational Risk Appetite Matrix

Conduct a Risk Controls Self Assessment (RCSA) in which all operational risks are listed and scored based on Likelihood x Impact along with the controls in place to assess the residual score after implementation of various mitigation techniques

Impact ↑	catastrophic	Low Med	Medium	Med High	High	High
	critical	Low	Low Med	Medium	Med High	High
	moderate	Low	Low Med	Medium	Med High	Med High
	minor	Low	Low Med	Low Med	Medium	Med High
	neglectable	Low	Low	Low Med	Medium	Medium
		rare	unlikely	possible	likely	certain
		Likelihood →				

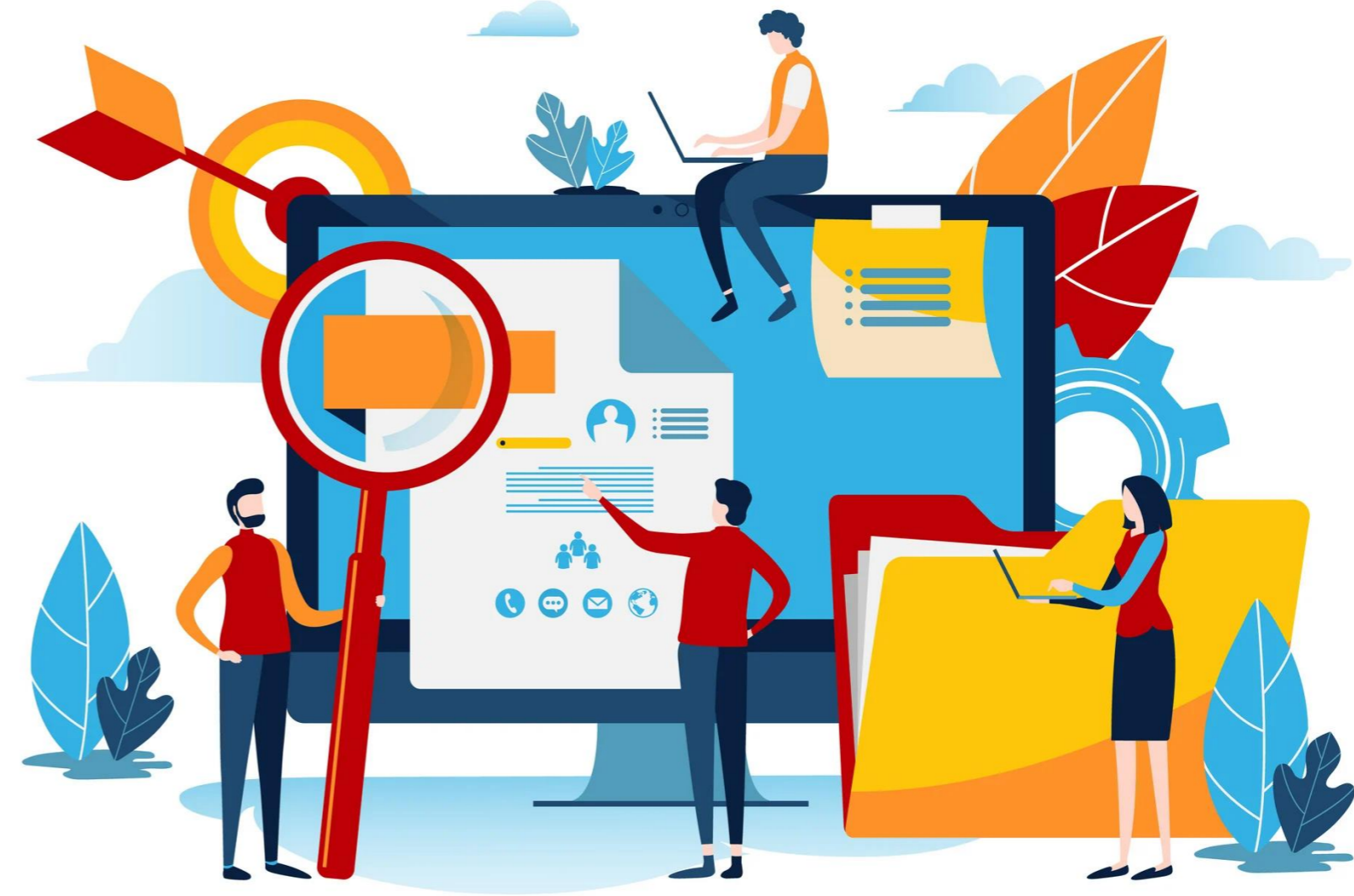


# USING QUANTITATIVE ANALYSIS TO SETTING LIMITS & EARLY WARNING SYSTEMS

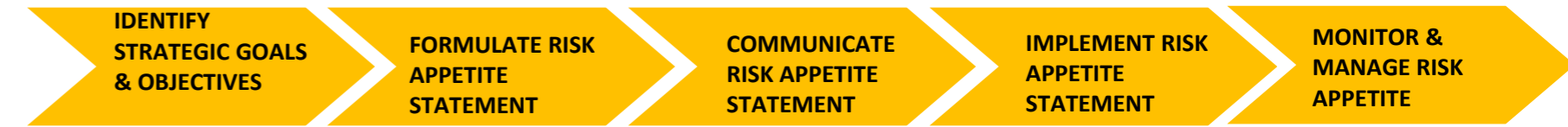


## Steps 3 & 4: Communicate & Implement Risk Appetite Statement

Once the Strategic objectives & goals are identified and the Risk Appetite is formulated explicitly, the framework is communicated to all stakeholders for implementation



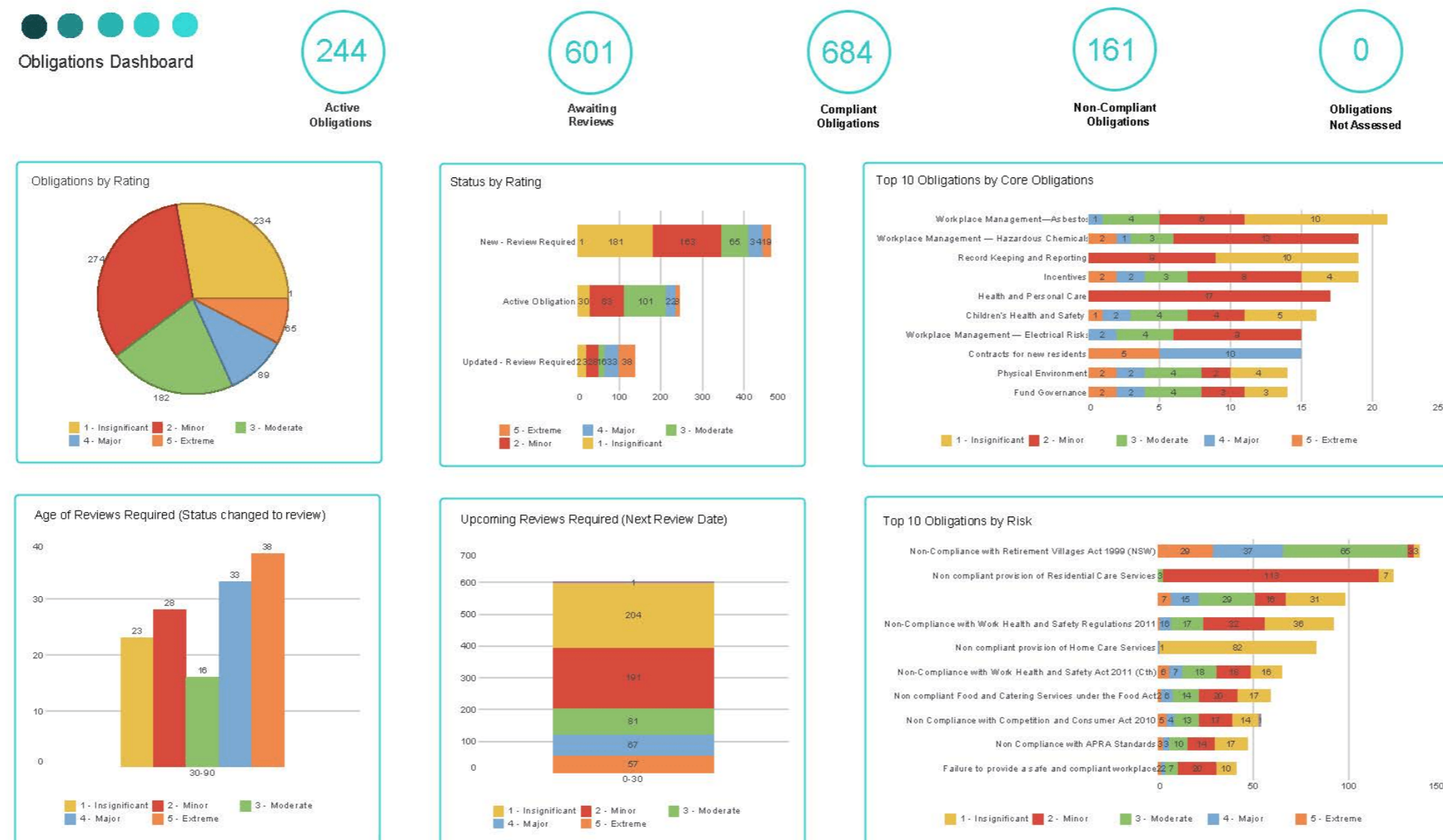
# ON-GOING MONITORING, CALIBRATION, & EXCEPTION MANAGEMENT



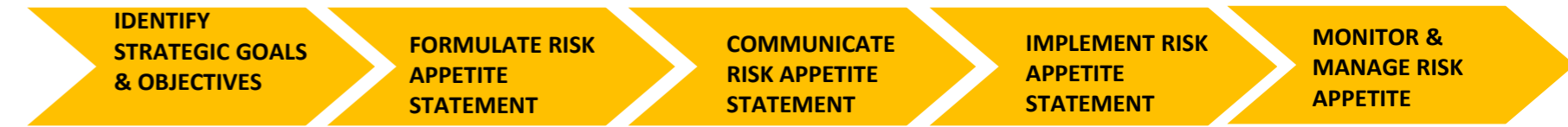
## Step 5: Monitor & manage Risk Appetite

### MONITOR

Key Risk Indicators are setup on a Management Dashboard with periodical reporting.



# ON-GOING MONITORING, CALIBRATION, & EXCEPTION MANAGEMENT



## Step 5: Monitor & manage Risk Appetite

### CALIBRATE

Quarterly progress reports are shared between Risk Management & Executive Committee to ensure conformity of business activity, strategy in place, and Key Risk Indicators.

Reality always has a tendency to challenge even the most robust of assumptions, and a calibration based on heuristics is always a welcome idea

Stay dynamic and responsive to changing conditions

Identify assumptions that turned out to be inaccurate

Tackle the correlation between various risks

Draw a clear picture of the firm's Risk Profile

Collect KRIs from across the organization

# ON-GOING MONITORING, CALIBRATION, & EXCEPTION MANAGEMENT



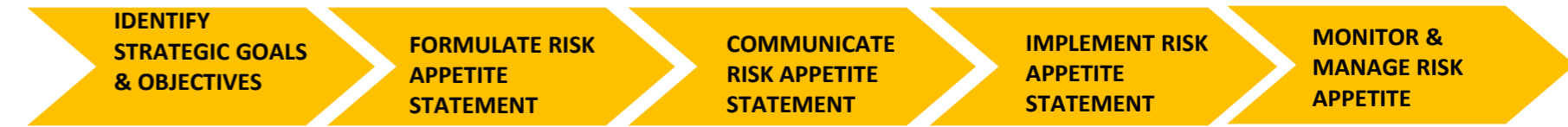
## Step 5: Monitor & manage Risk Appetite

### MANAGE EXCEPTIONS

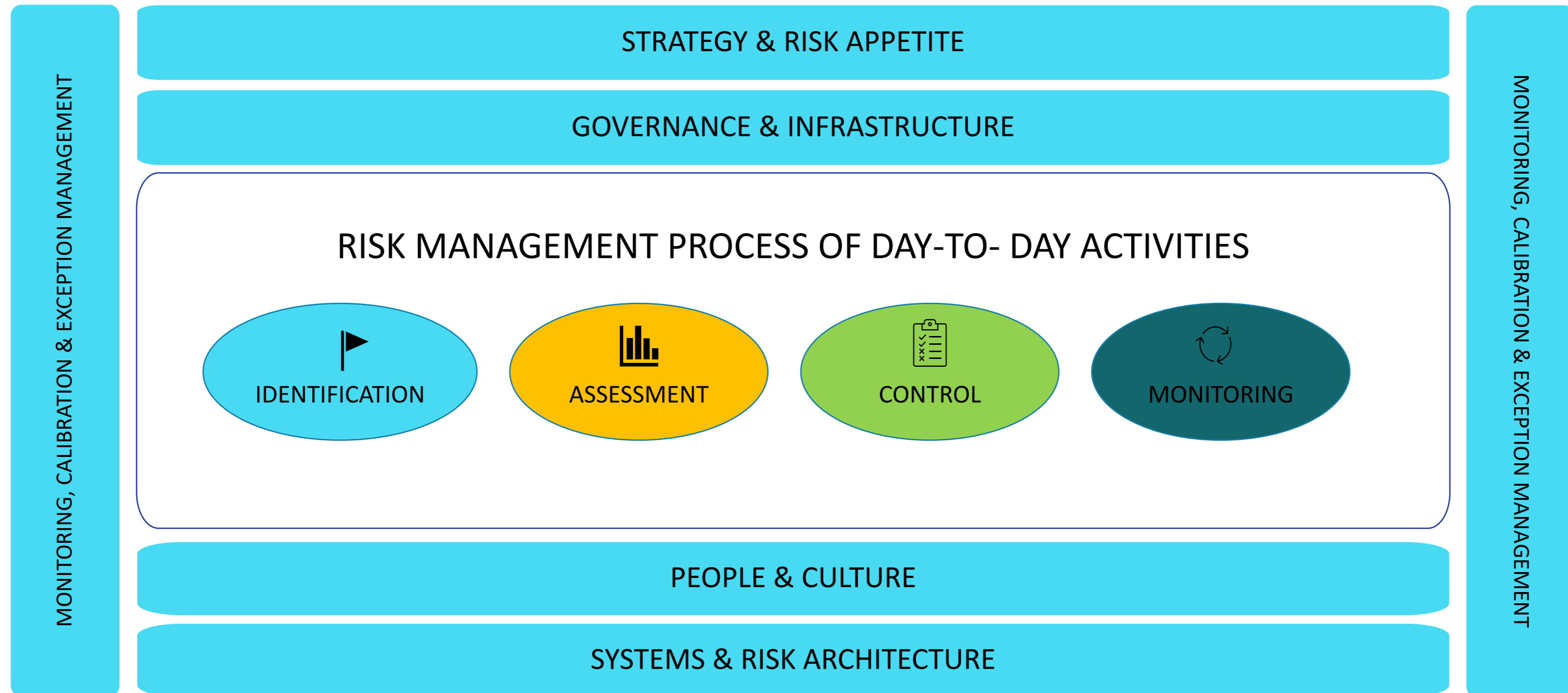
- Breaches leading to non-compliance with Regulatory limits:** No exceptions allowed. Breaches should be immediately handled with safeguards set in place to make sure risks are contained within these parameters consistently
- Breaches leading to non-compliance with internal guidelines:** If temporary breaches due to one-time events, approve exceptions and keep in an internal log that will be shared with the Executive committee for further monitoring. Otherwise, escalate to Executive committee for decisive action
- Breaches stemming from / leading to divergence from agreed upon strategy:** Monitor if exceptions are due to an erroneous setup of limits Vs Strategy, or from an intentional / accidental divergence from the strategy. Exceptions allowed, but a review of the underlying framework should be planned to either alter limit structure or alter strategy



# ON-GOING MONITORING, CALIBRATION, & EXCEPTION MANAGEMENT



## Step 5: Monitor & manage Risk Appetite





# USING RISK APPETITE TO MONITOR RISK EXPOSURES AND ACTIONING STOP LOSSES

Escalation process when Risk Tolerance is breached

## Step 1

Risk informs the Executive Committee for decision making

## Step 2

Risk informs Business Units of Executive Committee decision for remediation

Escalation process when Risk Threshold is breached

## Step 1

Risk informs Executive Committee for immediate remedial action. Stop Loss orders are enforced when applicable

## Step 2

Risk escalates the breach for BOD via the Board Risk Committee

RISK APPETITE

RISK TOLERANCE

RISK THRESHOLD

# EPILOGUE

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## CHALLENGES

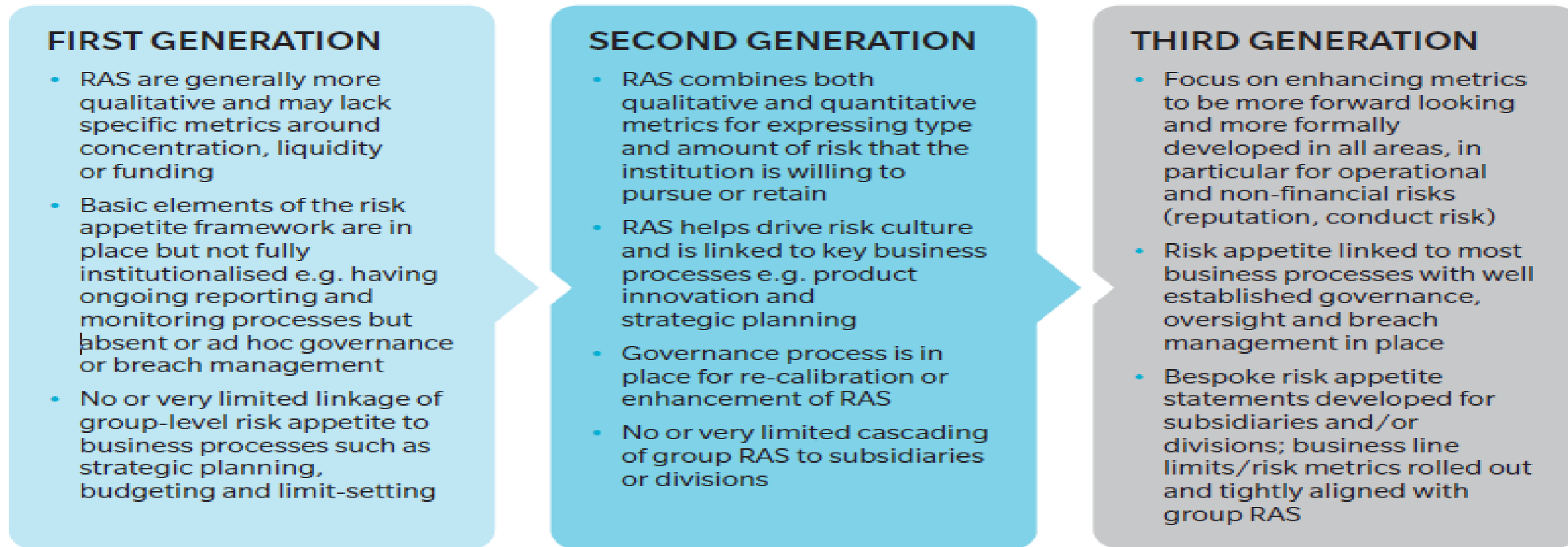
- ❑ **Lack of engagement from upper management** would inevitably impede the framework if not make it impossible to implement
- ❑ Data intensive process: **Possible technological limitations** where it may be very hard in some organizations to organize centralized dashboards to be updated on-demand
- ❑ **Difficulty in linking cascading Top-Down indicators to the existing Bottom-Up limits** and to the Line of Business and entities
- ❑ **Presence of too many KRIs** may make the monitoring and action taking somehow challenging

## ENHANCEMENTS

- ❑ Try to **complement the existing framework with a Top-Down approach connected to strategy** and bottom up limits
- ❑ **Simplify the overall limit framework** by defining the cascading principles per risk type, per legal entity and per business line

# EPILOGUE

Exhibit 1: Evolutionary path of embedding risk appetite



% OF BANKS THAT FALL IN EACH CATEGORY ACROSS INDUSTRY\*1



\*1 Based on RMA Oliver Wyman risk appetite survey of 65 institutions.

# EPILOGUE

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*“A SHIP IN THE HARBOUR IS SAFE, BUT THIS IS NOT WHAT SHIPS ARE BUILT FOR”*

