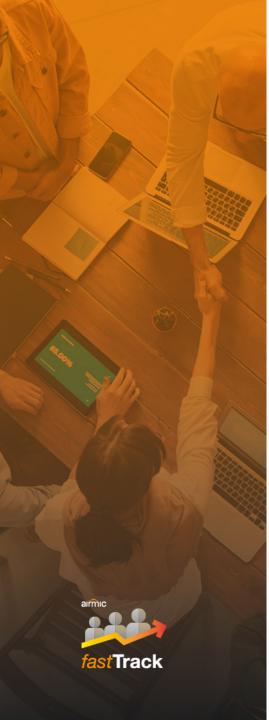


# **Risk Appetite and Risk Maturity as Performance Drivers**

Tom Teixeira, ADL Risk Practice Leader

George Simpson, ADL Risk Practice



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Three Components of Risk Appetite

Theoretical Approach to Risk Appetite

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Examples

# Typical comments and challenges from recent risk appetite related engagements

- Senior management teams want a more 'forward looking' and dynamic risk capability and do not want surprises
- The use of risk appetite statements is on the increase driven by regulation and compliance
- In parallel, cultural and behavioural barriers to further risk improvement persist







# Boards/Senior Teams are requesting updates to their Risk Appetite statements to make them more relevant and focused

#### **TYPICAL OBJECTIVES**

- Opdate the existing risk appetite and supporting methodology to support improved decision making and drive performance improvement
- Output Align the risk appetite with the corporate strategic goals, governance bodies and Group appetite (if required)
- Suild consensus within the Executive teams and Board to provide a clear understanding on the level of informed and controlled risk that can be undertaken







# Three driving components of Risk Appetite

Risk appetite statement should encapsulate:

- Company Culture: Culture defines the "how" (conduct and behaviour) we will achieve our objectives and is reflected in the appetite statement
- Strategy and Objectives define the "what" which enables the identification of the business drivers
- Risk Capacity: Denotes the tangible, measurable parameters, and ultimately the amount and type of risk an organization is able to support in pursuit of its business objectives







# The Theoretical approach to Risk Appetite

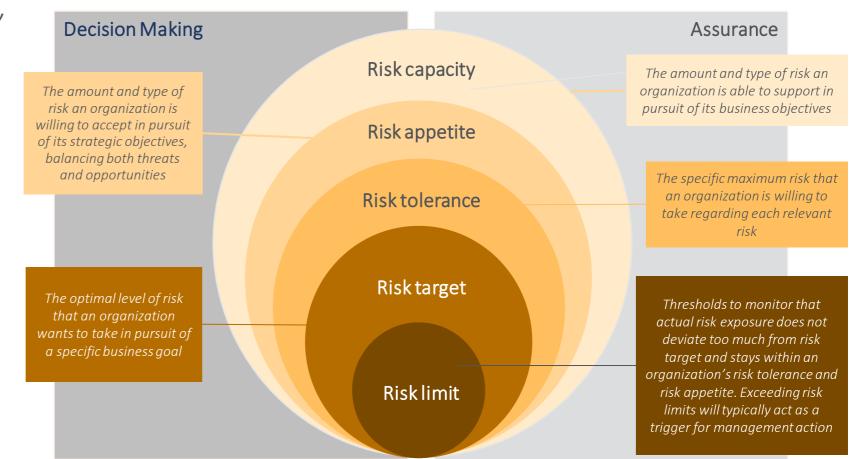
A Risk Appetite Framework should *effectively support decision making* and risk assurance processes

To do so it needs to be:

 Comprehensive: It should have the appropriate breadth, reflecting coverage of risk landscape

✓ Concrete and Practical:

- Where possible, material risks should be quantified and compared to risk tolerances
- For risks inappropriate to quantify, qualitative boundaries should be established
- Consistent and Coherent: Tolerances throughout the organisation need to form a balanced system of relative boundaries, avoiding excessive allowance in some areas and excessive restrictions in others, and should align with the business model of the organisation







# Importance of the risk framework evaluation in driving cultural change

**Risk capacity and** 

tolerance

**Risk Maturity** 

How effectively risks are

controlled in adherence to risk

appetite. It is a snapshot of the

risk position and helps identify

the areas ripe for

improvement

- Defines leadership's intent and approach, accounting for company culture, regulatory landscape, external factors
- Enables leadership to tangibly outline the desired culture and conduct of the firm
- Requires consistent communication from leadership to embed and enforce appetite within business performance
- Tangible, measurable boundaries to operate in

# Risk Appetite

The amount and type of risk an organization is willing to accept in pursuit of its strategic objectives, balancing both threats and opportunities

#### **Risk Materiality**

The qualitative and quantitative criteria used to measure and assess the severity and probability of financial and non-financial risk

- Qualitative and Quantitative thresholds defined in alignment with industry and culture
- Embed risk materiality frameworks and thresholds in business processes and delegate authorities to enable/empower decision making
- Threshold definitions should include financial and non-financial parameters, depending on data availability
- Culture should inform selection of appropriate threshold values

Control effectiveness assessment Prioritised improvement targets

- Impacts on risk appetite approach and approach to governance
- Influences most appropriate assurance activities to monitor decision-making

#### **Control effectiveness**

- Systematic review of control effectiveness to identify areas for continuous improvement and inform revisions to risk appetite
- Enables alignment and development of KRIs and KPIs to give a comprehensive view of the business





## **Risk Models and Measurements**

### Risk Models and Measurements

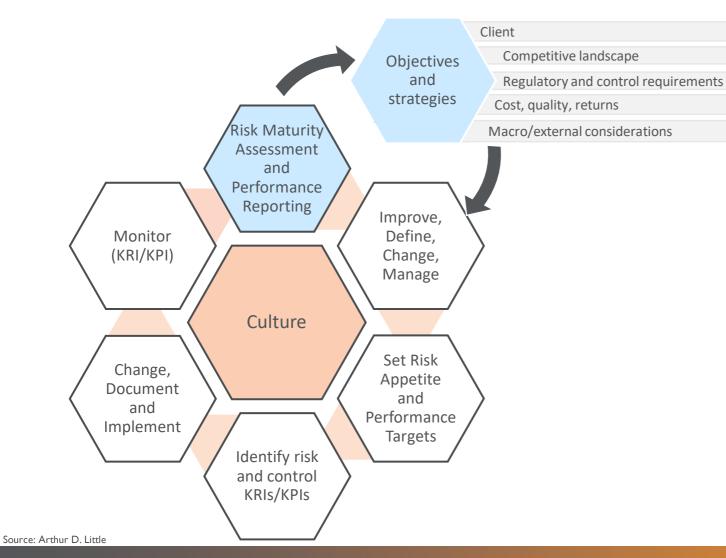
ILLUSTRATIVE

		People	Process Data and Systems		Culture and Leadership	Governance	
Category		Wellbeing and competence of employees	Process effectiveness in delivering business objectives	Availability, integrity, completeness, accuracy, consistency vulnerability, safety of data and systems	Leadership quality and communication effectiveness Employee engagement and trust	Effectiveness of governance structures and reporting/escalation	
Tools and sources		<ul> <li>Employee survey</li> <li>Employee engagement</li> <li>HR metrics (attrition, training hours, etc.)</li> <li>Health and Safety/wellness measures</li> <li>Competency matrices and PD plans</li> </ul>	<ul> <li>Current internal KPIs</li> <li>Control testing</li> <li>Error rates, rework, etc.</li> <li>Artificial Intelligence, Machine Learning, Natural Processing Language</li> <li>Process Mining techniques</li> </ul>	<ul> <li>Data governance and ownership structures</li> <li>Architecture reviews and systems obsolescence</li> <li>Change management process</li> <li>System availability and performance metrics</li> <li>Data mining techniques</li> </ul>	<ul> <li>Leadership communication frequency and quality</li> <li>Leadership behaviour, style and consistency</li> <li>Surveys to assess employee understanding and engagement</li> <li>HR metrics (inclusion and diversity)</li> <li>Escalation and whistleblowing metrics</li> </ul>	<ul> <li>Governance, accountability and escalation structures</li> <li>Risk management frameworks and reporting</li> <li>Risk policies</li> <li>Environmental, Social, Governance KPIs</li> <li>Governance meeting attendance and admin (minutes/actions/follow-up)</li> </ul>	





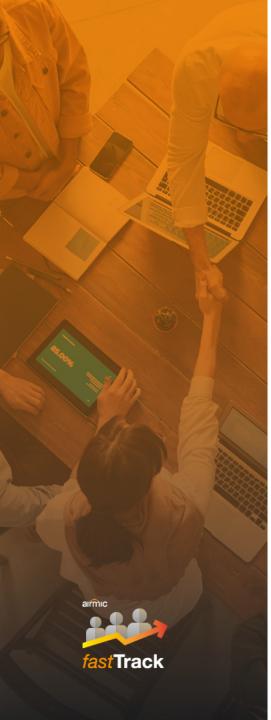
# **Risk Maturity to Drive Continuous Improvement**



- Risk maturity assessment will identify the control gaps, failures and areas for improvement, informing overall strategy
- The **risk maturity models rationalise the assessed gaps** against the risk appetite and materiality
- This enables a **prioritisation of remediation activities and continuous improvement** initiatives by providing a tangible, measurable, year on year framework which identifies progress
- It enables a comprehensive cost benefit analysis of attaining the business objectives, by considering not solely performance and risk facets to change
- Risk maturity is an enabler for decision making and empowerment, enabling delegation and operational decision-making within defined materiality thresholds and risk parameters







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## Step 1 – Setting a Risk Appetite Context



#### THE COMPANY PLC - DRAFT RISK ATTITUDE STATEMENT

The aim of the risk attitude statement is to demonstrate that the Group has a clear understanding of the risk it is prepared to take and the limits within which it is prepared to operate. The statement has been prepared to be compliant with the UK Corporate Governance Code (2014) Section C: Accountability, which affirms that the Board is responsible for "determining the nature and the extent of the principal risks it is willing to take in achieving its strategic objectives". It is generally recognised that that the risk attitude statement supports this requirement.

The Company's approach to risk management is guided by our group strategy, the related objectives and by our core values. Our risk attitude is defined as the amount of risk we are willing to accept in order to achieve these strategic objectives. This document should be seen as statement of intent and provides a description of the Group's attitude and tolerance to risk as a result of our strategy and operating model. The qualitative tolerances used can vary from zero to high and reflect the level of risk that will be tolerated with existing controls in place. These levels are based on the Group's corporate risk heatmap which is used to prioritise risk using a combination of agreed impact and probability criteria.

The Company provides innovative and efficient infrastructure that underpins our daily lives, supports communities and enables economic growth. We finance, develop, build and maintain complex infrastructure such as transportation, power and utility systems, and social and commercial buildings. Our main geographies are the UK, US, Middle East and South East Asia. Therefore, the Group delivers its corporate objectives operating within a low overall risk range. Based on this context, different objectives will attract different levels of risk tolerance.

The Group's success in achieving its goals is measured against a number of strategic objectives in delivering them the Board area a level of risk between against each big over the







# **Step 2 – Linking to Strategic Objectives and Setting the Tolerance**

CULT	URE	STRATEGY AND C	BJECTIVES	RISK CAPACITY			
	Group Strategy/ Objectives	Risk Attitude	Tolerance Level	Interested Stakeholders			
	<i>Lean</i> – improve operational performance by increasing productivity and cash generation	We will manage our operational activities and exposures to avoid adverse impact on annual profit before tax - this should not exceed £4M at any point in time.	Med	Shareholders, Debtholders, Rating Agencies, Management			
	<b>Expert</b> – invest to attract, retain and develop the best employee and subcontractor talent	We wish to retain talented employees and upskill our existing workforce. We are prepared to develop our talent from within through investment in training and development programmes (e.g. 5% <i>Club</i> ) to give our people opportunities to develop their careers.	Med	Management			
	<b>Trusted</b> – deliver value to customers through disciplined contracting processes	We will not compromise new or existing client relationships by poor bid and mobilisation practices.	Low	Shareholders, Customers, Management	ILLUSTRAT		
: Arthur D. Little		The risk to erance is	Low to				

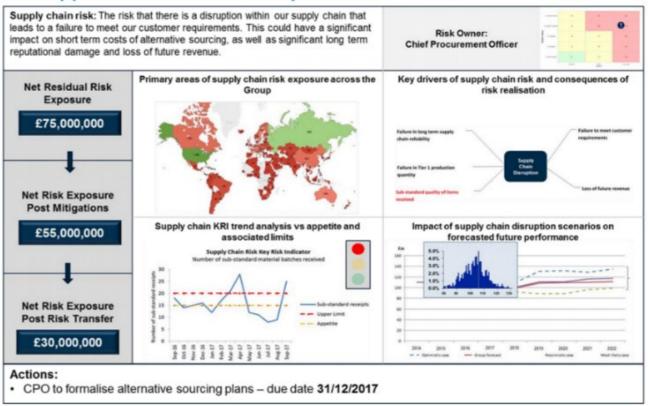




## Step 3 – Risk Maturity Models – General

Risk Appetite dashboards and associated templates should be designed to facilitate decision making and drive proactive behaviour

### Risk Appetite in Practice - Key Risk Dashboard







# Step 3 – Risk Maturity Models – by Business Unit

#### Aggregated Risk Exposure mapped by Unit Appetite

Risks are aggregated at any and all levels of the organisation and mapped to the firm's risk appetite thresholds specified at each level of the organisation In the present case, the risk appetite is defined according to the organisational objectives of the firm

Organisational Reports	Drag a column header here to group by that colum	m	
	Title	Unit Type	Incl Res Exposure
Organisational Structure	ABC Corp	Strategic	2,783,400.00
E 💋 Root	Child Unit Title	· Unit Type	Incl Res Exposure
ABC CORP	Australia	Strategic	180,000.00
Australia	France	Strategic	60,000.00
France	Germany	Strategic	160,000.00
Germany     Germany     South Africa	Saudi Arabia	Strategic	20,000.00
South Amea     South Amea     South Amea	South Africa	Strategic	685,400.00
€ G USA	United Kingdom	Strategic	78,000.00
Saudi Arabia	USA	Strategic	1,600,000.00
	Title	Unit Type	Incl Res Exposure
	😑 South Africa 🚽	Strategic	857,400.00
	Child Unit Title	Unit Type	Incl Res Exposure
	SA BU1	Business	484,400.00
	SA BU2	Business	201,000.00
	SA BU3	Business	2,000.00
	SA BU4	Business	80,000.00
	SA BU5	Business	60,000.00
	SA BUG	Business	30,000.00
	Title	Unit Type -	Incl Res Exposure
	🖻 SA BU1 🔻	Business	484,400.00
	Child Unit Title	Unit Type	Incl Res Exposure
	Finance SA BU1	Business Activity	68,400.00
	HR	Business Activity	216,000.00
	Investment portfolio	Business Activity	0.00
	п	Business Activity	200,000.00
	Sales and Marketing	Business Activity	0.00

Source: http://www.barnowl.co.za/insights/a-3-step-approach-to-implementing-risk-appetite-and-tolerance/

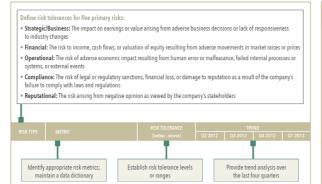




# Step 3 – Risk Maturity Models – by Business Unit

#### Aggregated Risk Exposure mapped by Risk Category

- The risk categories result from the existing risk management framework of the firm
- For each risk category, metrics are identified as indicators that will help to oversee the level of risk over time and space
- A level of tolerance is established for the outputs of each risk type' metric. The outputs of a risk metric are compared to a predetermined range, also called risk tolerance range, to help understanding whether the current scenarios can be considered as acceptable or not



DIGI/ TVDE	METRIC	RISK TOLERANCE RANGE	TREND					
RISK TYPE			Q2 2012	Q3 2012	Q4 2012	Q1 2013		
	ROE	10%-15%						
	ROE – Ke (cost of equity capital)	0%-5%						
	Market-to-Book Ratio	1.0x-1.5x						
STRATEGIC/	Diversification Benefit (%)	>20%						
BUSINESS	New Loan Growth (per quarter)	5%-8%						
	New Deposit Growth (per quarter)	\$500mm						
	Tier 1 Leverage Ratio	>10%						
	Unexpected Earnings Volatility	<20%						
	% Loan Delinquency (30+)	0.5%-1.0%						
	Credit Concentration as % of Tier 1 Capital	<15%						
CREDIT,	NII Sensitivity (Year 1)	3%-5%						
MARKET, AND	EVE Sensitivity (+100bp)	6%-8%						
	Liquidity Coverage Ratio (90 days)	120%-150%						
	Material Exceptions to Financial Risk Policies and Limits	0						
	% of High-Risk Operational Control Issues	<10%						
	Operational Losses as % of Total Revenue	<1%						
OPERATIONAL	% of Failed Business Transactions	<2%						
	% of Ineffective Key Controls	<5%						
	# of Cyber Incidents with Business Impact	5-10						
	# of High Severity Compliance Issues	0						
COMPLIANCE	% Progress in Resolving MOU/MRA Items	>100%						
	% of Compliance Areas Deemed Effective	90%-80%						
	% Retention of High-Potential Key Managers	>80%						
	% Employee Satisfaction and Engagement	>90%						
DEDUTATIONAL	Regulatory Ratings (CAMEL)	1 or 2						
REPUTATIONAL	% Customer Satisfaction	>85%						
	# of Significant Legal, Ethical, and Reputational Events	0						
	Cumulative Five-Year Stock Return vs. Comparable Index	>20%						

• Source: IMA, Implementing an Effective Risk Appetite p.15 (2015)





#### ILLUSTRATIVE

# **Step 4 – Continuous Improvement**

#### ILLUSTRATIVE

#### **Continuous Improvement**

- By identifying the underlying risk maturity, in conjunction with the associated cause and effect, one can identify the root cause to address the risk and performance improvement needs
- For example, the company may wish to improve customer satisfaction due to competitive pressures or changing business objectives
- At present customer satisfaction is at risk appetite of 85%
- However the business transaction failure is at threshold
- One could explore the interrelationship between customer satisfaction and transaction failures, to drive improved performance, and conversely an improved customer experience

			RISK TOLERANCE RANGE	TREND			
				Q2 2012	Q3 2012	Q4 2012	Q1 2013
		ROE	10%-15%				
	STRATEGIC/ BUSINESS	ROE – Ke (cost of equity capital)	0%-5%				
		Market-to-Book Ratio	1.0x-1.5x				
		Diversification Benefit (%)	>20%				
		New Loan Growth (per quarter)	5%-8%				
		New Deposit Growth (per quarter)	\$500mm				
		Tier 1 Leverage Ratio	>10%				
		Unexpected Earnings Volatility	<20%				
		% Loan Delinquency (30+)	0.5%-1.0%				
		Credit Concentration as % of Tier 1 Capital	<15%				
	CREDIT,	NII Sensitivity (Year 1)	3%-5%				
	MARKET, AND LIQUIDITY	EVE Sensitivity (+100bp)	6%-8%				
	LIQUDITI	Liquidity Coverage Ratio (90 days)	120%-150%				
		Material Exceptions to Financial Risk Policies and Limits	0				
		% of High-Risk Operational Control Issues	<10%				
		Operational Losses as % of Total Revenue	<1%				
FAILED BUSINESS TRANSAG	THON	% of Failed Business Transactions	<2%				
		% of Ineffective Key Controls	<5%				
		# of Cyber Incidents with Business Impact	5-10				
	COMPLIANCE	# of High Severity Compliance Issues	0				
Interrelationship		% Progress in Resolving MOU/MRA Items	>100%				
		% of Compliance Areas Deemed Effective	90%-80%				
		% Retention of High-Potential Key Managers	>80%				
		% Employee Satisfaction and Engagement	>90%				
	DEDUTATIONAL	Regulatory Ratings (CAMEL)	1 or 2				
CUSTOMER SAT	REPUTATIONAL	% Customer Satisfaction	>85%				
		# of Significant Legal, Ethical, and Reputational Events	0				
		Cumulative Five-Year Stock Return vs. Comparable Index	>20%				

Source: IMA, Implementing an Effective Risk Appetite p.15 (2015) ٠





# Conclusion

#### In developing a 'fit for purpose' framework, it is worth considering recent experience and challenge

Whilst risk appetite statements are becoming a standard part of risk management frameworks across many industrial sectors, many consider practical implementation an area that requires further development. Key challenges and considerations include:

- For risk appetite to be meaningful it has to be founded on the basis of clear business drivers these can be both internal and external in nature
- Risk appetite and related tolerances (qualitative and quantitative) need to be calibrated at different levels of the business, as well as across different corporate functions
- Risk appetite can be used as an effective tool to arrive at a more optimum decision on the balance between risk retention, mitigation and transfer (risk transfer optimisation)
- Risk Appetite and Maturity models can be used to identify improvements, focus effort and foster a continuous improvement mentality
- Statements must be formulated and developed in a way to avoid unintended constraints or artificial 'breaches'
- The ability to help management allocate resources and understand risk/benefit trade-offs







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