



Strategic Risk and Insurance alignment

ERM 2.0

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An integrated approach to risk has become a necessity

New risk themes

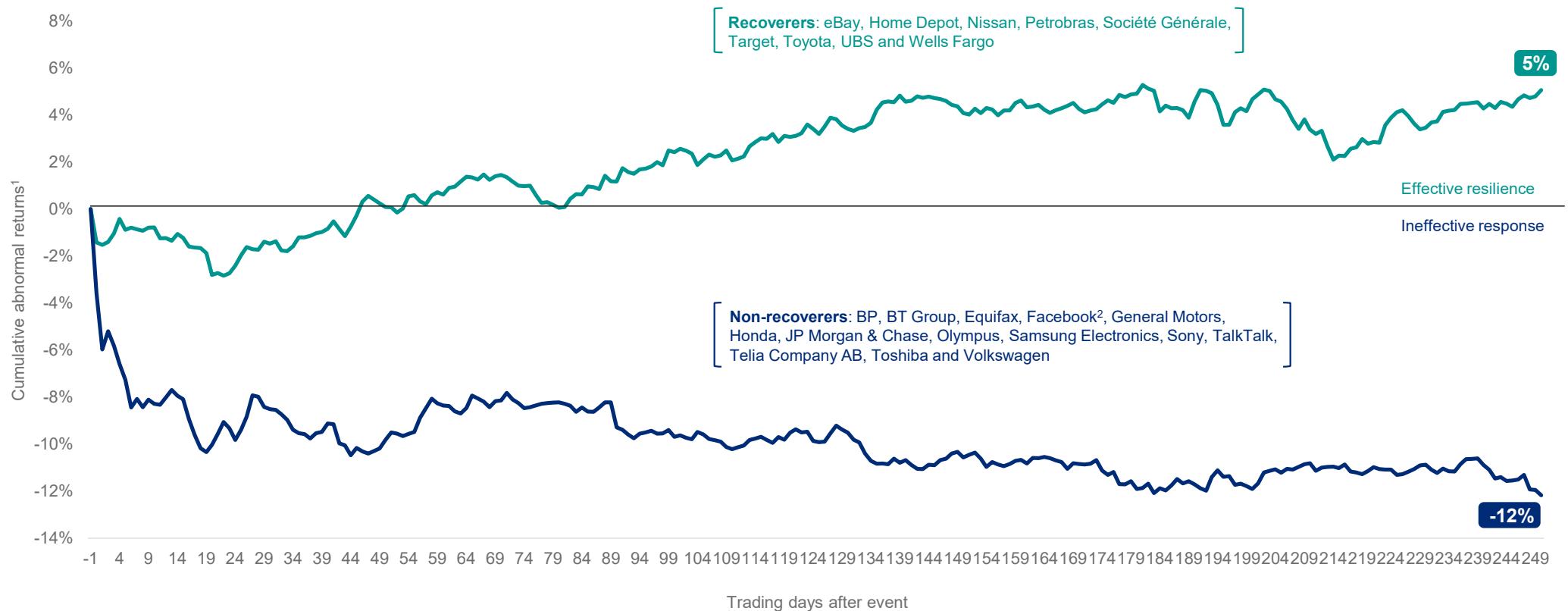
- A growing understanding of risk in organisations and the ever accepting role of enterprise risk management
- More customer centric, lean teams with a need to have reserves
- The role of CRO

Aligning strategic risk and insurance

- Where to start – a roadmap, building support / managing upwards
- Limitations of risk standards
- A digital data-driven approach to risk and insurance, real business value is generated by improving efficiency and the quality of risk decisions
- The combination of these factors has led to our development of the Strategic Risk and Insurance Alignment: ERM 2.0 Framework presented herein

Getting it wrong has a long-term impact on share price

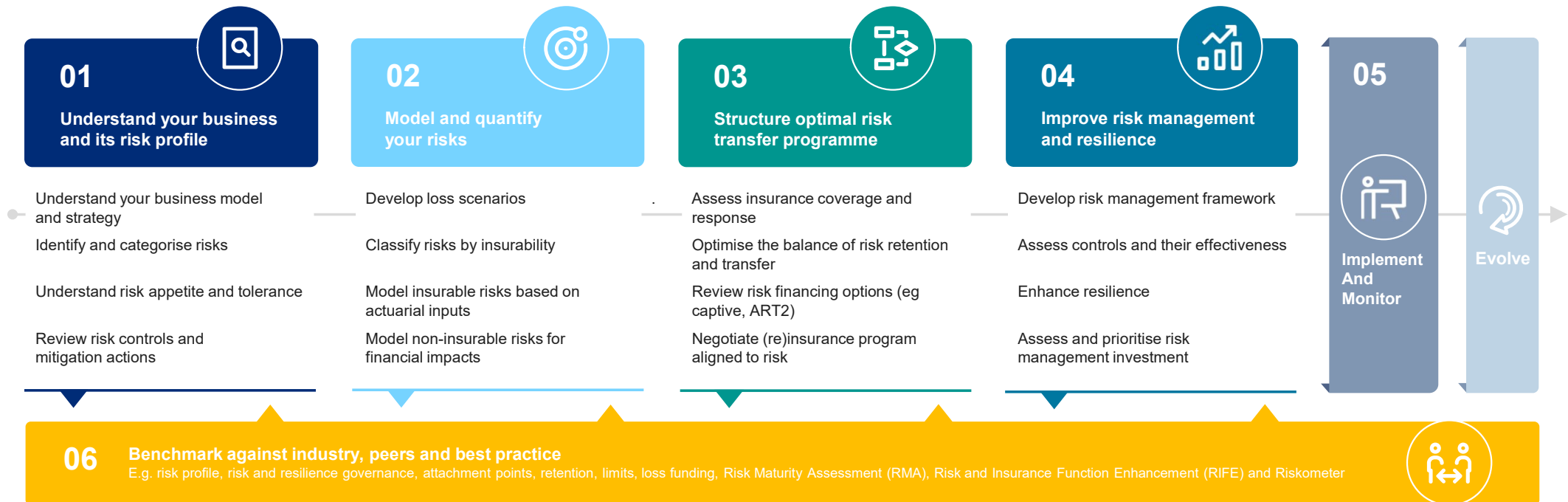
having an integrated approach in place effectively delivers long-term benefit for companies of all sizes



¹The sum of the differences between the expected returns on a stock (using the market model) and the actual return of a stock.

²Facebook market data available up to 116 trading days only (31st August 2018)

Marsh has developed the strategic risk and insurance alignment framework to help clients to create and protect value through analytically enabled ERM



Risk profiling

Connecting your strategy, business drivers, and associated risks

Objectives

- Ensure risk alignment is set in the context of your organisation's strategic objectives
- Understand your risk universe
- Setting a culture with Senior level support - being visual and practical



Understand your business and its risk profile



Model and quantify your risks



Structure optimal risk transfer programme



Improve risk management approach and resilience



Implement risk management solutions and monitor progress



Benchmark against industry, peers and risk best practices / standards

Key actions



Understand your business model and strategy

- Discussion on strategy, business drivers and performance metrics
- Review of risk management documentation



Identify and categorise risks

- Identify all major risks across your business
- Use a risk taxonomy to allow integration and escalation through a risk hierarchy
- Prioritise focus through a qualitatively risk assessment to determine likelihood and multiple impacts of risks (e.g. financial, operational, reputational etc.)



Understand risk appetite and tolerance

- Review of risk governance approach
- Prepare & issue an online risk appetite survey
- Conduct interviews with senior leadership to determine appetite
- Produce ERM appetite documentation



Review risk controls and mitigation actions

- Determine the main current controls on which residual risk rating is based
- Determine control ownership and effectiveness of controls
- Flag any additional mitigations for the organisations consideration

Risk profiling

Connecting your strategy, business drivers, and associated risks

Illustration of output formats



Example deliverables

Strategic risk register and heat map

Risk governance documentation

Risk appetite statements, Matrix and Guidance

Risk controls mapping



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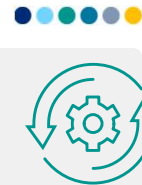
Benchmark against industry, peers and risk best practices / standards

Modelling and quantifying

Determining the financial exposure of key risk scenarios

Objectives

- Measure the impacts of potential events to fully understand the financial implications and use this to prioritise your major risks
- Quantify your risks to make informed decisions on the control measures, retention and transfer of risk
- Managing bias / subjectivity / group think



Key actions



Develop loss scenarios

- Review the organisations existing risk assessment data, incidents, claims
- Develop (or enhance) scenarios: where, what, who, where, when?
- Consider black swan events (counterfactual analysis)



Classify risks by insurability

- Map risk scenarios to potential business impacts in insurance terminology (1st / 3rd party, assets, BI (revenue, AICOW)
- Specify impacts to ensure they can be charted against the relevant insurance policies and used to inform insurance decisions



Model insurable risks based on actuarial inputs

- Supplement client loss and exposure data with industry data
- Run the model to generate stochastic loss projections (i.e. forecast losses at various probabilities)
- Calculate implied cost of funding losses (i.e. outside of existing risk financing and insurance arrangements) with client own capital



Model non-insurable risks for financial impacts

- Utilise client loss and exposure data with industry data to generate stochastic loss projections (i.e. forecast losses at various probabilities)
- Conduct Subject Matter Expert (SME) discussions to inform distributions for scenarios without loss data
- Run the model, conduct sensitivity analysis and review with Risk, Strategic and Financial Planning SME's

Example deliverables

Loss scenarios and business impact mapping

Loss projections

Economic Cost of Risk (ECoR) to inform retention

Financial model with KPIs at risk



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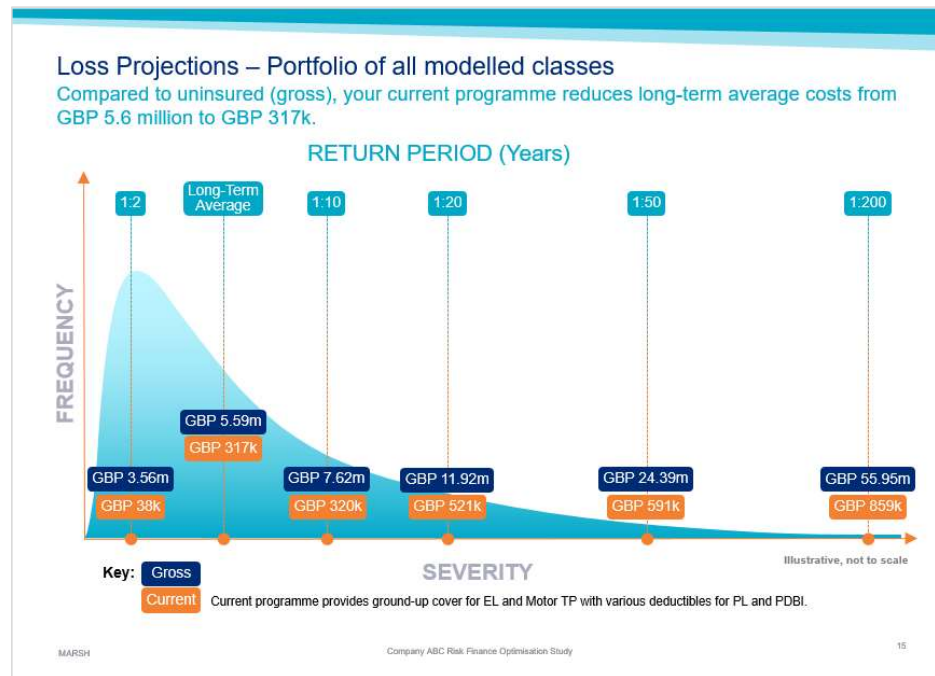


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Determining the financial exposure of key risk scenarios

Illustration of output formats



Example deliverables

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Optimising risk transfer

Insurance programme designed around threat exposure and appetite

Objectives

- Evaluate your current risk transfer program (remodelling with alternatives, if required) to identify risk financing enhancements
- Design and define the optimal strategy for retaining and transferring risk, and execute in the market



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Key actions



Assess insurance coverage and response

- Map business impacts from loss scenarios against existing insurance policies to test coverage and responsiveness; identifying potential gaps / areas for policy enhancement



Optimise the balance of risk retention and transfer

- Calculate implied cost of funding unexpected or uninsured losses with own capital
- Identify most financially efficient blend of risk retention and risk transfer.



Review risk financing option (e.g. captive, ART)

- Discuss insurable risk appetite with key stakeholders
- Assess viability of non-conventional risk transfer mechanisms (e.g. parametric solutions.)



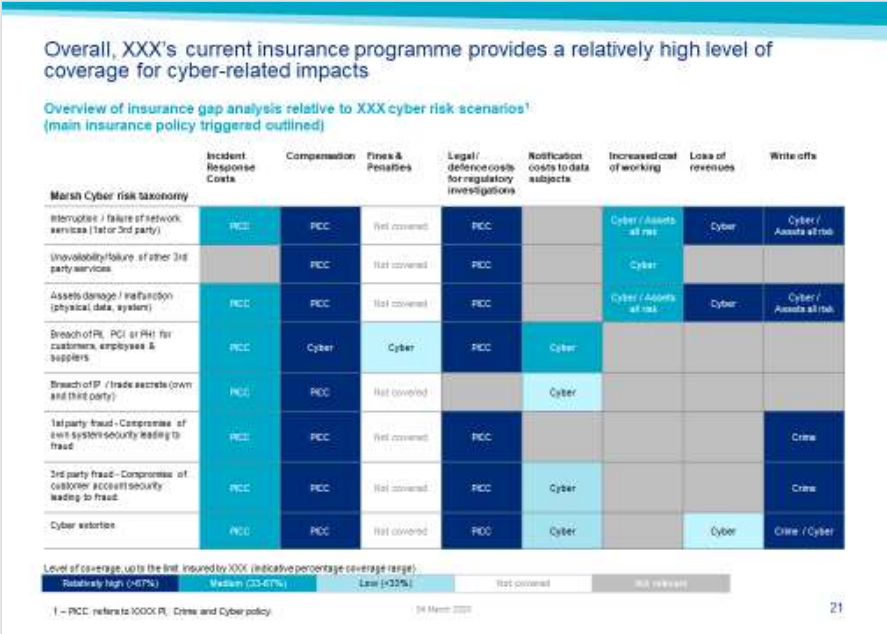
Negotiate (re)insurance program aligned to risk

- Using outputs from previous steps, define and design optimal programme structure and pricing
- Leverage your brokers expertise and capabilities

Optimising risk transfer

Insurance programme designed around threat exposure and appetite

Illustration of output formats



Example deliverables

Insurance coverage heat map

Insurance purchasing decision making framework

Alternative risk financing option assessment

Optimal insurance programme structure



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Risk management improvement

Integrating risk controls and aligning with exposure priorities

Objectives

- Review the risk management framework across strategic, operational, financial and regulatory categories and improve where required
- Determine control effectiveness and any additional risk mitigations to manage risk within appetite and provide resilience



Key actions



Develop risk management framework

- Operationalise risk appetite design risk tolerance metrics
- Improve the risk management framework to ensure appropriate risk hierarchy, clear appetite statements, robust risk analysis and controls
- Set escalation criteria and triggers within the risk framework to inform communication, reporting and action planning



Assess controls and their effectiveness

- Determine risk controls and ownership (e.g. via bowtie methodology) and compare to best practices
- Assess control effectiveness for design, implementation and governance



Enhance resilience

- Conduct threat assessment and quantify the tolerance for outage/ disruption for each component of the value chain
- Determine or review recovery strategies and ensure continuity and response planning is appropriate e.g. robust Business Continuity Plans and Crisis Management Plans
- Test plans to evaluate effectiveness and build response capability



Assess and prioritise risk management investment

- Conduct Cost Benefit Analysis to prioritise risk investment and then implement additional mitigation improvements



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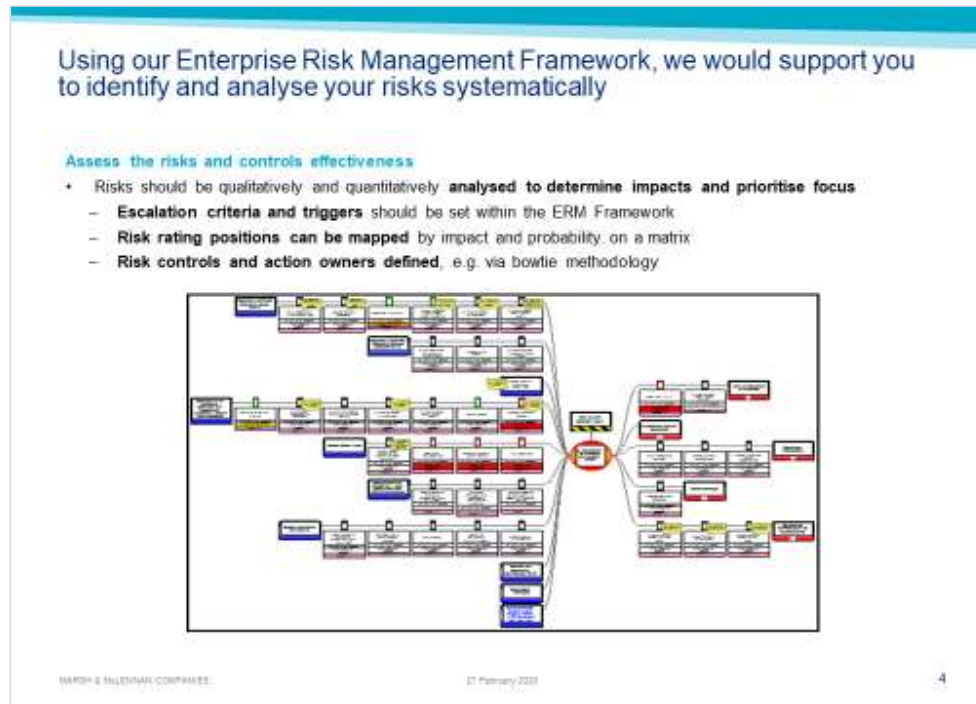


Benchmark against industry, peers and risk best practices / standards

Risk management improvement

Integrating risk controls and aligning with exposure priorities

Illustration of output formats



Example deliverables

Risk management framework

Control mapping

Bowtie analysis

Resilience plans e.g. business continuity, crisis management



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Benchmark against industry, peers and risk best practices / standards

Targeted projects

Combining strategic, operational and assurance best practices

Objectives

- Show risk movements and provide controls assurance, track emerging risks, plan and implement management actions, communicate risk governance and engage with staff to achieve desired risk culture
- Undertake operational risk control assurance incl. property risk surveys, property and equipment valuations, health and safety reviews, safe driving at work



Key actions



Strategic initiatives

- Update risk assessments and conduct analysis on emerging risks
- Conduct deep dive risk reviews in the following: supply chain and procurement, climate change, cyber etc.
- Improve risk governance through writing policies and procedures



Operational initiatives

- Provide accurate and reliable reinstatement valuation for your assets in the current market (e.g. buildings, machinery and plants)
- Survey your portfolio to identify key risks and recommendations for opportunities alongside technical risk engineering services
- Evaluate your management of health, safety and wellbeing and recommend strategy to reduce the likelihood of claims
- Evaluate your motor risk fleet management and provide recommendations to improve motor risk profile
- Assess the strength of your systems and documentation to improve claims defensibility



Risk assurance

- Controls mapping, risk and resilience assurance



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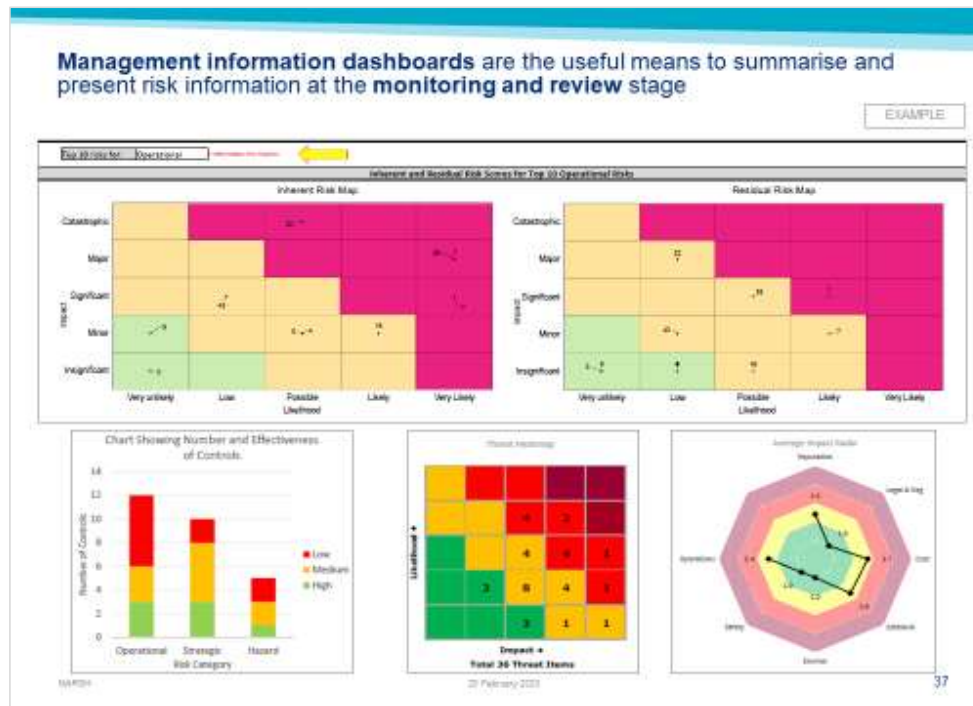


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Example deliverables

Deep dive reviews: supply chain, projects, cyber etc.

Claims defensibility reviews

Specification and rollout of risk monitoring and reporting tool

Operational risk analysis and surveys



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Benchmark against industry, peers and risk best practices / standards

Benchmarking

Plotting of current state and road mapping of future state

Objectives

- Independent review of the organisations risk practices, governance and status against strategic and operational risk standards
- Comparison of approaches to peer group and industry risk data, determination of future state goals and road mapping of activities required to close gaps



Key actions

➔ Review practices to risk standards and industry best practices

- Determine current state practices through a combination of documentation review, online surveys and interviews

➔ Peer group comparison and industry risk data benchmarking

- Plot a selection of industry peers (anonymised) on the maturity models to indicate relative positioning
- Compare risk data to industry data for attachment points, retention, limits, loss funding

➔ Determination of future state and risk strategy

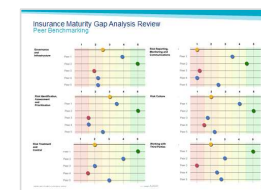
- Interviews and workshop to determine future state risk management requirements – creation of a blueprint vision
- Road mapping of the activities required to close gaps, cost benefit analysis and ownership
- Creation of a Risk Strategy approved by the Executive team, with subsequent implementation and tracking of progress

Illustration of output formats

1 Risk maturity examples



2 Peer group comparison / future state mapping



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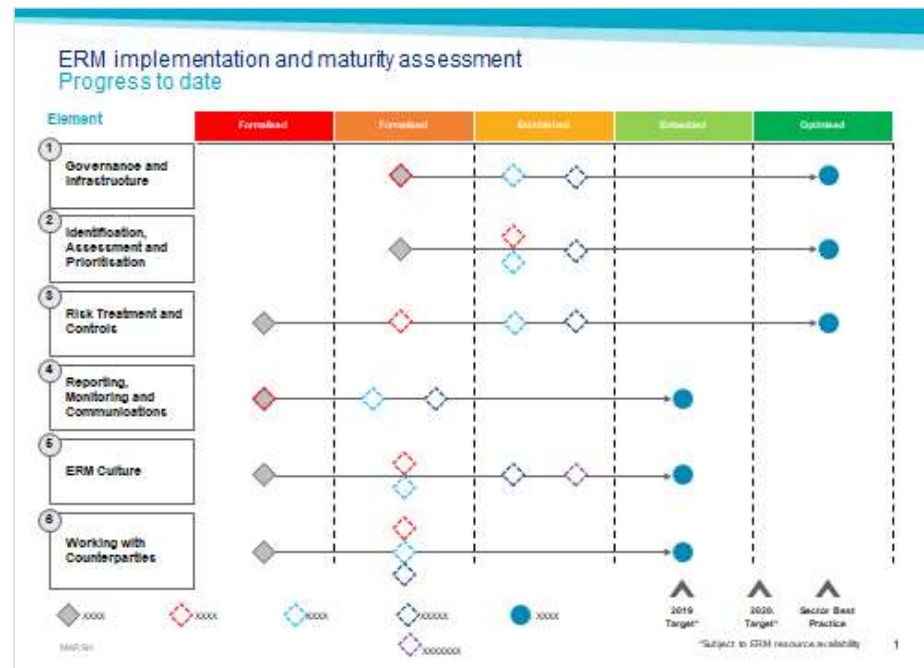


Benchmark against industry, peers and risk best practices / standards

Benchmarking

Plotting of current state and road mapping of future state

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Example deliverables

Risk Maturity Assessment and Risk & Insurance Enhancement

Deep dive reviews into specific areas e.g. ERM, Resilience

Peer comparison and industry risk data benchmarking

Future state road mapping and risk strategy

In closing

- Organisations today are faced with increasingly **complex and often rapidly evolving risks** from a range of sources. **If not controlled, these complex risks present volatility** to a firm's business cycle and potential financial damage
- Now more than ever as demonstrated by COVID-19, the effective management of **risk and resilience is fundamental to the success of an organisation**, however, it is also imperative that the purchase of **insurance is fully aligned to** these management activities and that the risk transfer programme is structured to deliver optimum value
- Our approach takes the best practice from traditional Enterprise Risk Management (ERM) and combines them with a **data-driven approach, quantitative analysis and insurance expertise to optimise management and financing of risk**



Understand your business and its risk profile

connecting an organisation's strategy and business drivers to identify and analyse your risks systematically.



Model and quantify your risks

projecting the operational and financial impact of key risks to inform decisions on control measures, retention and transfer.



Improve risk management and resilience

aligning risk controls with exposure priorities, identifying additional risk mitigations to manage risk within appetite and providing organisational resilience.



Structure optimal risk transfer programme

designing an insurance programme around threat exposure and appetite to ensure the most efficient use of capital.



Implement risk management and monitor progress

by combining strategic, operational and assurance best practices.



Benchmark against industry, peers and risk best practice

from current state to future state road mapping.



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