Roads to Revolution

Digital transformation: reshaping resilience for the future

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1. The challenge

The digital revolution, or as it is sometimes called, the fourth industrial revolution, is transforming the ways in which organisations develop and execute strategy, which will significantly change business and risk and resilience models.

Several leading studies have highlighted the fundamental changes that the digital revolution is bringing and the speed with which that change will occur.

KPMG's *Now or never: 2016 CEO outlook*, for example, warns that the pace of change will be profound. "The speed of change will be, quite literally, inhuman, as the advancement of data and analytics and cognitive and machine learning drive forward change more quickly than humans alone could ever achieve."

To address the digital transformation and the impact on business and resilience models, the approach to it must be integrated.

As the World Economic Forum stated: "We do not yet know just how it will unfold, but one thing is clear: the response to it must be integrated and comprehensive, involving all stakeholders of the global polity, from the public and private sectors to academia and civil society."

Airmic recognises that organisations must be aware of how the digital revolution could transform the way in which businesses build resilience (see section 2.1) and, crucially, how they approach and manage risk (see section 2.2). It will carry out in-depth research to determine what resilience looks like in a digitally-transformed business world within in a new study, *Roads to Revolution*.

1.1 The follow-up to *Roads to Ruin* and *Roads to Resilience*

Roads to Revolution follows the publication of *Roads to Ruin* and *Roads to Resilience*. It will be the third in a series of thought leadership reports which identify the core characteristics to resilience and corporate success, with the first of these reports offering learning on the behaviours that led to corporate crises (*Roads to Ruin*). The second provided insight on how the principles of resilience have helped resilient organisations build dynamic approaches to risk (*Roads to Resilience*); and the third will examine how resilience models are transforming as a result of advancements in technology (*Roads to Revolution*).

Roads to Revolution will build on the resilience model outlined in *Roads to Resilience*, which studied the characteristics of companies that have created a resilient culture which protects their business, brand and reputation.

Although each case study organisation within *Roads to Resilience* had different methods to achieving resilience, the research found that resilient companies have common characteristics, described as the 'five principles of resilience' (see Table 1) and four business enablers (the qualities that enable resilience).

The model brings into focus three core elements of the resilience model – resilience outcomes, resilience principles and business enablers (see Figure 1). Organisations that have succeeded in placing resilience at the centre of their performance achieve the resilience outcomes (respond, recover and review; prevent, protect and prepare).

> " *The speed of change will be, quite literally, inhuman, as the advancement of data and analytics and cognitive and machine learning drive forward change more quickly than humans alone could ever achieve.*"
>
> – KPMG's Now or never: 2016 CEO outlook

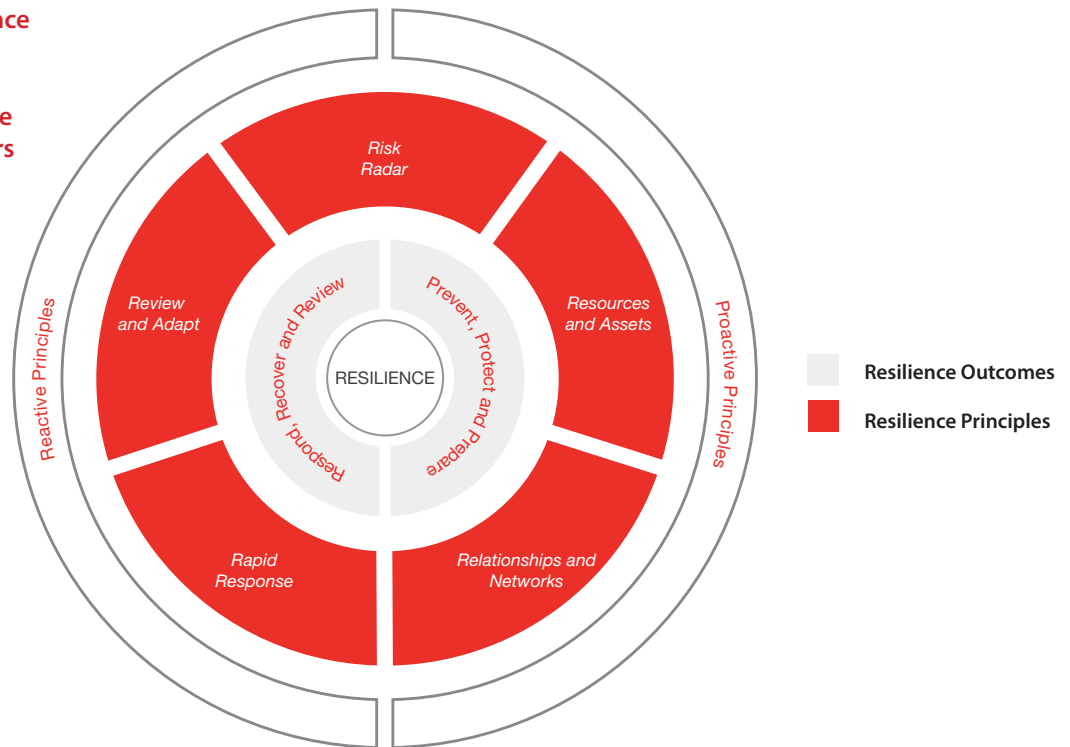**Figure 1: Resilience outcomes, principles of resilience and the business enablers**

Table 1: Five principles of resilience and four business enablers

THE FIVE PRINCIPLES OF RESILIENCE	BUSINESS ENABLERS
Risk radar: the ability to anticipate problems and see things in a different way will help an organisation develop an early warning system and be able to seize new opportunities.	These resilience principles do not just happen; they reflect the fact that companies have nurtured a resilient environment through four business enablers:
Resources and assets: well-diversified resources and assets provide the flexibility to respond to opportunities as well as adverse or changing circumstances.	■ **People and culture**
Relationships and networks: risk information flows freely throughout the organisation up to directors to prevent the 'risk blindness' that afflicts many boards.	■ **Business structure; strategy** ■ **Tactics and operations and** ■ **Leadership and governance**
Rapid response: capability that prevents an incident escalating into a crisis or disaster because people and processes are in place to quickly restore things to normal.	
Review and adapt: learn from experience, including near misses and make the necessary changes and improvements to strategy, tactics, processes and capabilities.	

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2. Purpose and research question

2.1 How will the digital revolution transform the resilience model?

Airmic recognises that the digital revolution could significantly change the resilience model outlined in *Roads to Resilience*, which many businesses currently use to build resilience against the risks that could lead to corporate failure (as outlined in *Roads to Ruin*).

Roads to Revolution will consider how:

- **the resilience model translates in a digitally-transformed business environment;**

- **the digital revolution has affected each of the five principles and four business enablers;**

- **the digital revolution will affect the principles and business enablers in terms of their processes, and the context and landscape they are addressing. For example, how will the digital revolution affect the way in which businesses calculate risk radars and risk appetites?**

- **how will the digital revolution will transform the management of risk? (see 2.2).**

2.2 How will the digital revolution transform the management of risk?

The research also aims to capture how the digital revolution and its related risks will fundamentally transform risk management in the future, and the ways in which risk management operates in this new digital landscape.

Little is understood about the plethora of risks and the interconnected nature of the threats linked to this wave of technological advancement.

A new approach to risk management is called for, which builds on existing approaches and takes into account the digital revolution and the challenges for organisations.

> *" Airmic recognises that the digital revolution could significantly change the resilience model, which many businesses currently use to build resilience against the risks and behaviours that could lead to corporate failure."*

Roads to Revolution sets out to understand how digital transformation will impact the top level and governance, and risk and insurance. It will consider the following areas:

THE TOP LEVEL

- **Board skill and non-executive director (NED) control:** managing risks arising from limitations on board competence and the ability of NEDs to effectively monitor and, as necessary, control of the executive arm of the company.

- **Board risk blindness: addressing risks from** the board failure to recognise and engage with risks inherent in the business, including risk to the business model, reputation, and 'licence to operate'.

- **Governance in the new digital world:** understanding how digital transformation could affect governance structures and how issues such as cyber governance gap can manifest within businesses.

- **Liability landscape:** the implications for boards in a digitally-advanced business world.

RISK MANAGEMENT AND INSURANCE

■ **Risk identification and digital dependencies:** capturing risks and dependencies of the organisation on connectivity, security, privacy and integrity of critical processes and assets and the vulnerabilities arising from these dependencies. Also assessing non-traditional risks such as those arising from employees, whether intentional or as a result of complacency/lack of risk awareness.

■ **Crisis response:** how the digital revolution can impact on traditional crisis response plans.

■ **Threat assessment:** exploring how companies can evaluate the risks of digital transformation to both their business and resilience models.

■ **Risk mitigation:** understanding how to manage, transfer and mitigate risks. Assessing the use of protection and insurance measures (including cyber insurance) to alleviate risks/ what are the risk transfer options?

■ **The role of the insurance market:** beyond risk transfer, what is the involvement of insurers and how can they support mitigation.

■ '**Ecosystem' risks:** understand new risks arising from digital delivery and third-party models, for example, applications, artificial intelligence, and combined data models.

■ **Regulation and incentives:** managing risk exposure from digital-enabled business models that fail to meet new national and international regulatory requirements.

3. Research methods

Case studies ✔   Focus groups ✔   Interviews ✔   Roundtables ✔

Similarly to its predecessors, *Roads to Revolution* will be based on in-depth case studies. Two sets of organisations will be examined in order to gain a pragmatic understanding of how organisations design, implement, execute, and adapt their risk management in changed delivery models. The case studies will include:

■ Six to eight innovative companies that are accelerating in their transformation and are embedding change within their business and resilience models. These companies embrace the opportunities of the new digital world and are, on a wider scale, pushing the trend towards digital revolution.

■ Six to eight companies that exist today and are beginning to take steps to transform models for tomorrow's digital world.

The research will be supported by focus groups and roundtables to provide reflection on the findings.

In-depth interviews with case study companies and industry experts will also take place to further understand the impact of the digital revolution on business and resilience models.

An advisory board will be created and will involve three member organisations and associated partners.

Julia Graham, deputy chief executive and technical director at Airmic, will chair the advisory board.

A leading university is expected to complete the work by December 2017. It is envisaged that the research will be sponsored by up to six partners.

4. Outputs

The primary audience for this research will be Airmic members, board of directors, risk managers as well as regulators, D&O insurers, rating agencies, both internal and external auditors, and all trade and professional bodes interested in the pursuit of excellence at board and senior management levels.

To this end, the findings from this research will be disseminated and discussed through an academically rigorous yet pragmatic report, a presentation at the Airmic conference in 2018, workshops and webinars, as well as publications in practitioner and academic journals, presentations at thought leading events as well as the media.

Also, participating companies will receive feedback on their risk management activities and processes.

5. Timeline

DECEMBER 2016

Agree proposal
Agree and confirm partners

FEBRUARY 2017

Start fieldwork

AUGUST 2017

Complete fieldwork

SEPTEMBER 2017

Workshop with the provision of preliminary/final results at the LAB Forum

OCTOBER 2017

Commence copywriting

DECEMBER 2017

Complete copywriting

JANUARY 2018

Final draft report

FEBRUARY 2018

Develop Communication strategy

Amendments to report, end of February

MARCH 2018

Internal presentation of report

APRIL 2018

Launch report

JUNE 2018

Launch event, annual conference