

**Milliman**  
IT TAKES VISION

# Agile Risk Management

## Building Resilience

Neil Cantle, *Principal*  
March 2016

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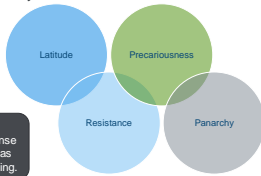
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### Resilience

- Key activities:
  - Anticipation
  - Response
  - Learning

Key dimensions of resilience:



...in the reactive world of the unexpected, the ability to make sense out of an emerging pattern is just as important as anticipation and planning.

Weick, Sutcliffe

Source: after Holling



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### Approaches to Risk Management



**Traditional**

Risk management encases the company.



**Agile**

Risk management is embedded within the company.



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Becoming Agile



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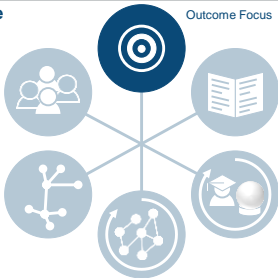
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Looking underneath



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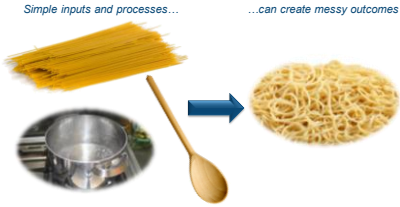
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### Underlying simplicity



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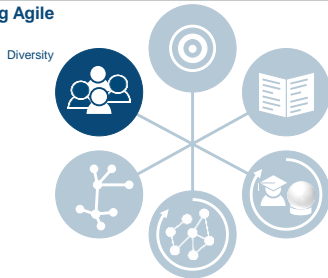
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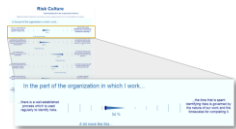
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### Knowing your cultures

Culture is a unique emergent property of an organising system of human activity. Its dynamics are not revealed by adding up the collective traits of individual members.



Source: Dr. H. Lewis



Resilience needs messy solutions

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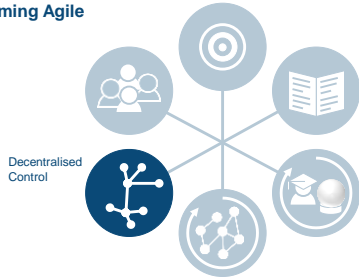
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### Control: Decentralised vs. Centralised



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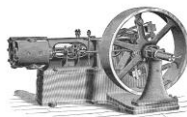
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### Management thinking



- "Outside" observer
- Companies like "hard" systems
- Cybernetic control systems
- Self-regulation with variance feedback



*"Organisation and management science has been based on theoretical foundations quite contrary to the experience of organisation reality"*  
Ralph Stacey

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### New management thinking

- Management are part of the system
- Companies are also "soft" systems
- Cannot choose outcomes – only next action
- Influence exerted through local interactions
- Communication is an ongoing process – must stay in the conversation



*"Narrative mediates between the norms of culture and unique individual beliefs, desires and hopes. It renders the exceptional comprehensible"*  
**Ralph Stacey**

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### Scaling – a matter of perspective



Images from Google Maps

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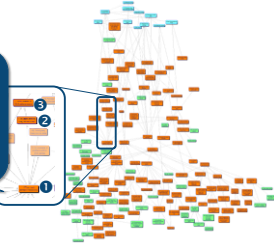
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### Picturing your thoughts

"If the data was lost by a partner there would be contractual issues to resolve which would strain the relationship and there would be damages to claim. This could cause a loss of confidence in the partner themselves..."



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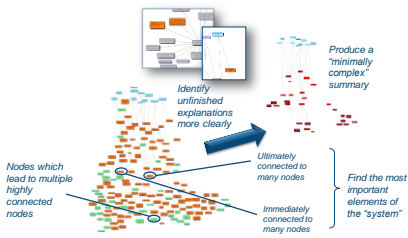
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### Cognitive analysis



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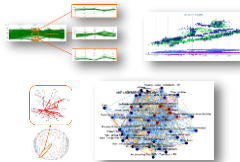
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### Pattern spotting in data

- Reveal non-linear relationships
  - Spot dynamic patterns
  - Study evolution
  - Multivariate relationships
  - Spot the "next big thing" early
- Interactions are the golden nugget



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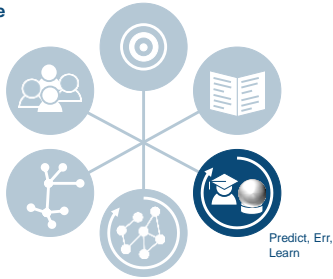
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### Becoming Agile



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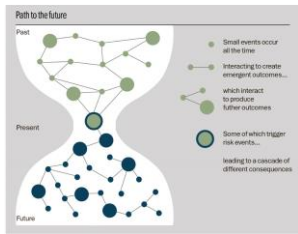
### Path to the future

• The present is built an interaction at a time, with many components

• How we got here is hard to say

• Where we will go ultimately is hard (impossible) to know

• Risk is in the future, so we look for patterns giving us clues



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### Monitoring performance – Learning



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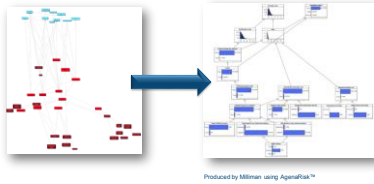
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### Bringing it to life

Explore your hypothesis and communicate it.  
Capturing highly non-linear behaviours and tipping points



Produced by Milliman using AperoRisk™

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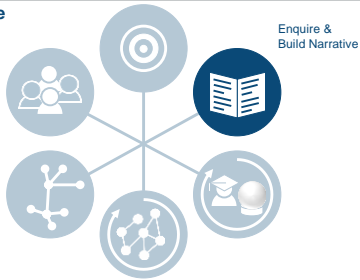
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### Becoming Agile



Enquire &  
Build Narrative

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### Principles of Agile Risk Management (1)

- Risk is only relevant in the context of uncertainty around business objectives.
- Many risks are unknown (and/or unforeseeable), but all business objectives are known. The potential impacts of uncertainty around objectives are much more manageable than abstract risks.
- Everyone needs to understand the business objectives and how they contribute towards them.
- Everyone needs to understand the potential impact of uncertainty around objectives - and the 'risk appetite', which is how the business feels about that. Personal experience and business intuitions are as important as (and sometimes more important than) models and calculations.
- Everyone is responsible for the impact of uncertainty in their own roles and objectives.

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## Principles of Agile Risk Management (2)

- The best people to make decisions that cope with uncertainty are the ones who understand the global implications well, and have the most expertise in implementing action (rather than the most senior people).
- Learning from actual events as they unfold, including any predictions you make, is a crucial contributor towards improving the understanding of uncertainty in a business.
- 'Emerging risks' are a potential source of information about how uncertainty parameters might be changing in the business.
- The primary goal of the risk management function is to promote behaviours that build resilience: the ability of the business to cope, whatever happens.
- The primary role of the CRO is to enable the application of the above principles throughout the business.

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