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# **What happens when you integrate risk and performance management?**

Matthew Leitch

[matthew@internalcontrolsdesign.co.uk](mailto:matthew@internalcontrolsdesign.co.uk)

# Agenda

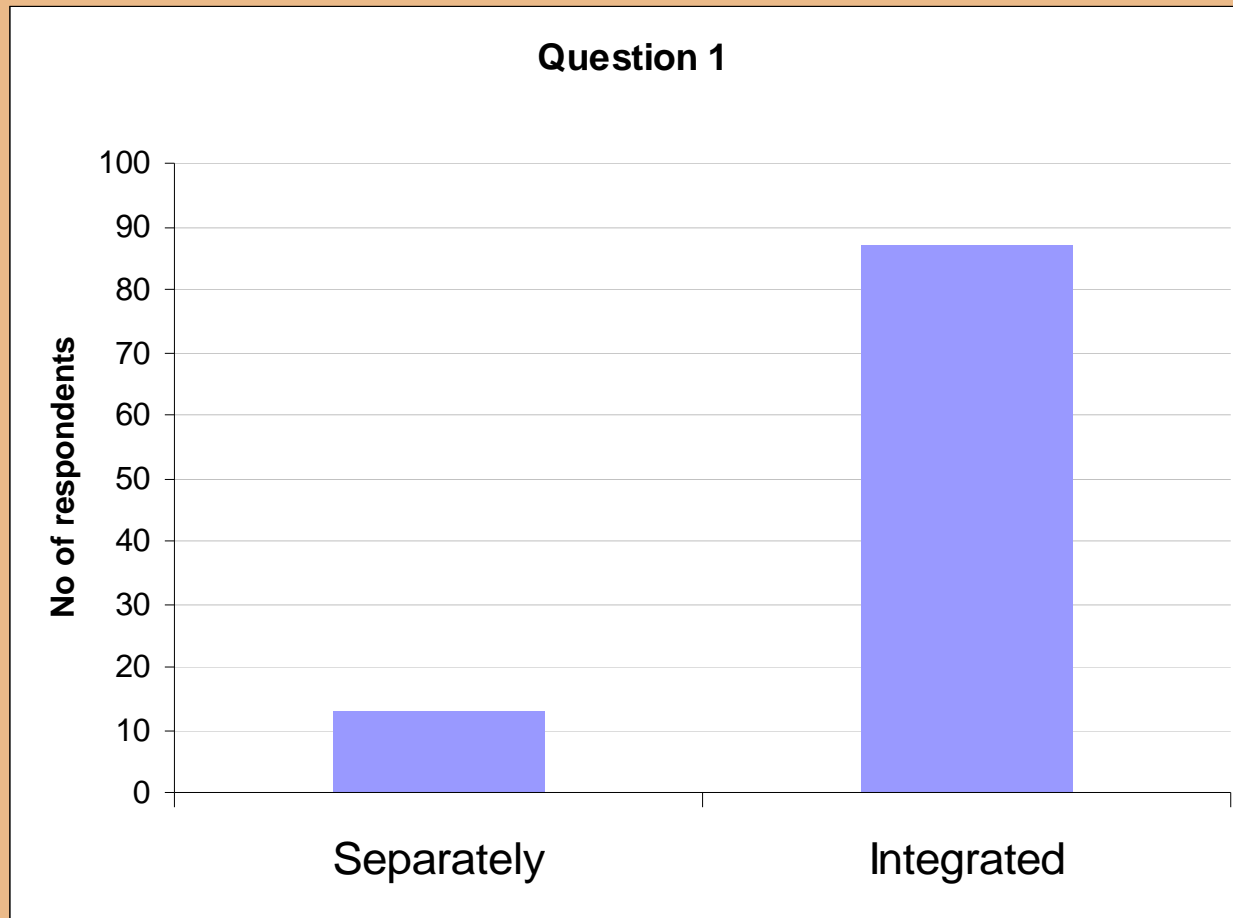
- Do we want to integrate?
- Lessons from a government department
- Lessons from simulation and mathematics
- Lessons from strategy maps
- Lessons from risk register content
- A prescription

**Do we want to integrate?**

# Opinions on risk and performance management

- Online survey, late 2008
- and audience poll in summer 2008.  
<http://www.internalcontrolsdesign.co.uk/progressive/niversion.html>
- **“Poll 1 of 15:** Assuming we have time to work on it if necessary, how should risk/uncertainty be managed?
  - Separately from other management thinking i.e. separate meetings, documents, specialist support manager perhaps.
  - Integrated into other management thinking e.g. about performance, strategy, planning, resource allocation.”

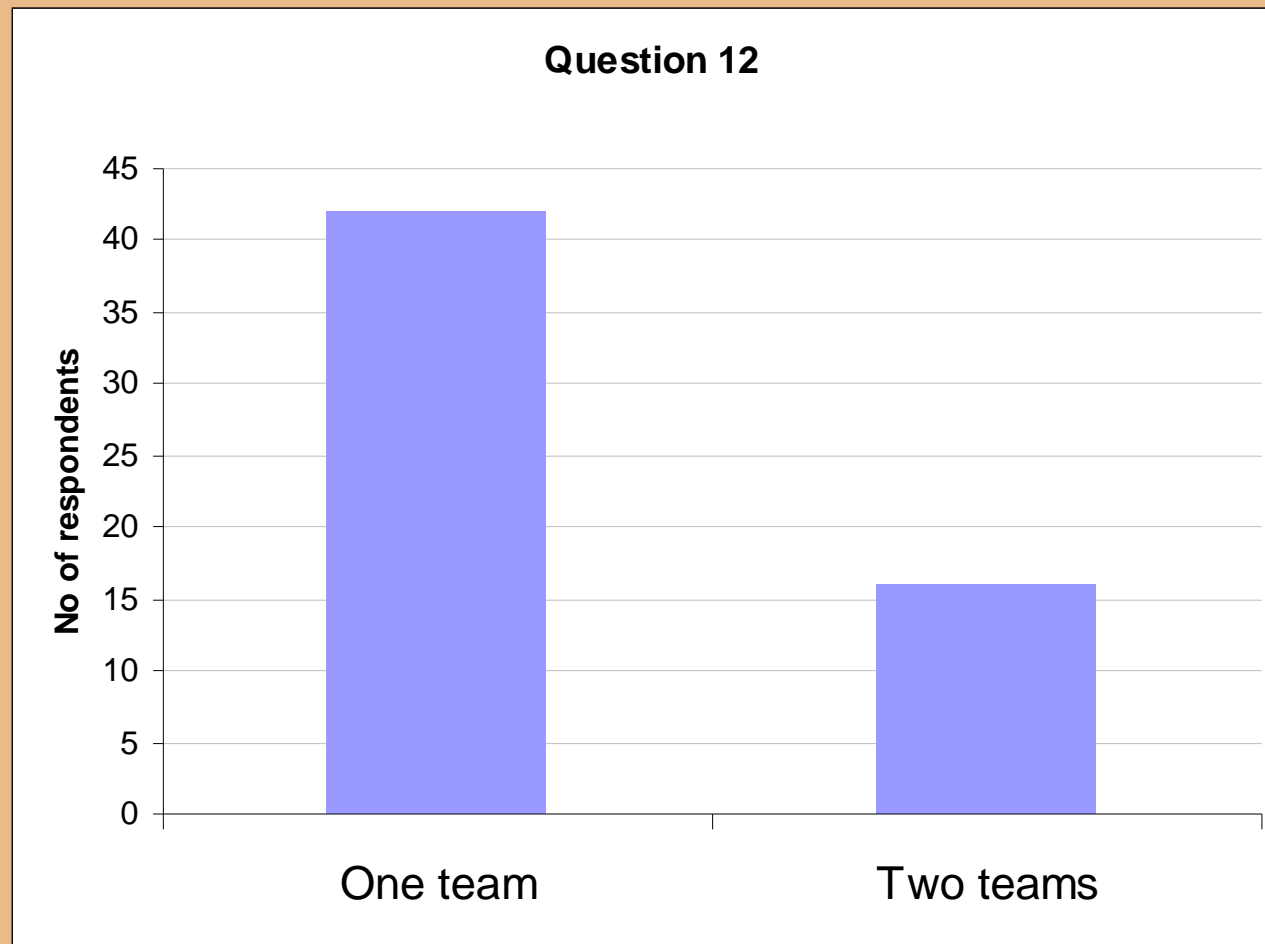
# Opinions on risk and performance management



# Opinions on risk and performance management

- **“Poll 12 of 15:** If an organization is in a position to create explicit models for risk analysis and for strategy/performance thinking, relevant to a particular aspect of its business and at the same organizational level, how should it organize the work?
  - Separate teams, meetings, documents, and models for strategy and for risk.
  - One team, one set of meetings, one set of documents, and one set of models.

# Opinions on risk and performance management



So, “YES!” we want to integrate.

But HOW?

# **Lessons from a government department**

# Merging experiment

- Performance report (Critical Success Factors) merged with Risk Register.
- i.e. “things we must get right” and “things that might go wrong”
- Many were the same point in different language:
  - CSF: “We need to raise customer satisfaction.”
  - Risk: “There is a risk that customer satisfaction will not increase.

# Key points

- We may not be entirely comfortable with their version of 'risk'
- But at least some 'risks' are clearly the same as objectives, just dressed differently
- Keeping them as if they are different ideas makes little sense.
- Is there a more developed example that can clarify the logic involved?

# **Lessons from simulation and mathematics**

# Monte Carlo simulation

- Start with a deterministic model e.g. schedule, cash flow spreadsheet
- Add information about uncertainty around estimated inputs
- Simulation tool calculates and displays implied uncertainty around predictions
- And displays Tornado diagram or similar, showing which uncertainties are most important

# Monte Carlo simulation

- Key points:
  - A model of the whole project/venture; not just risks
  - Uncertainty attached to many variables (inputs and propagated to other variables)
  - Variable & its probability distribution ~ a ‘risk’
  - E.g. “sales” and “impact of bad weather” are treated the same: as uncertain variables in model.
  - Beautifully integrated

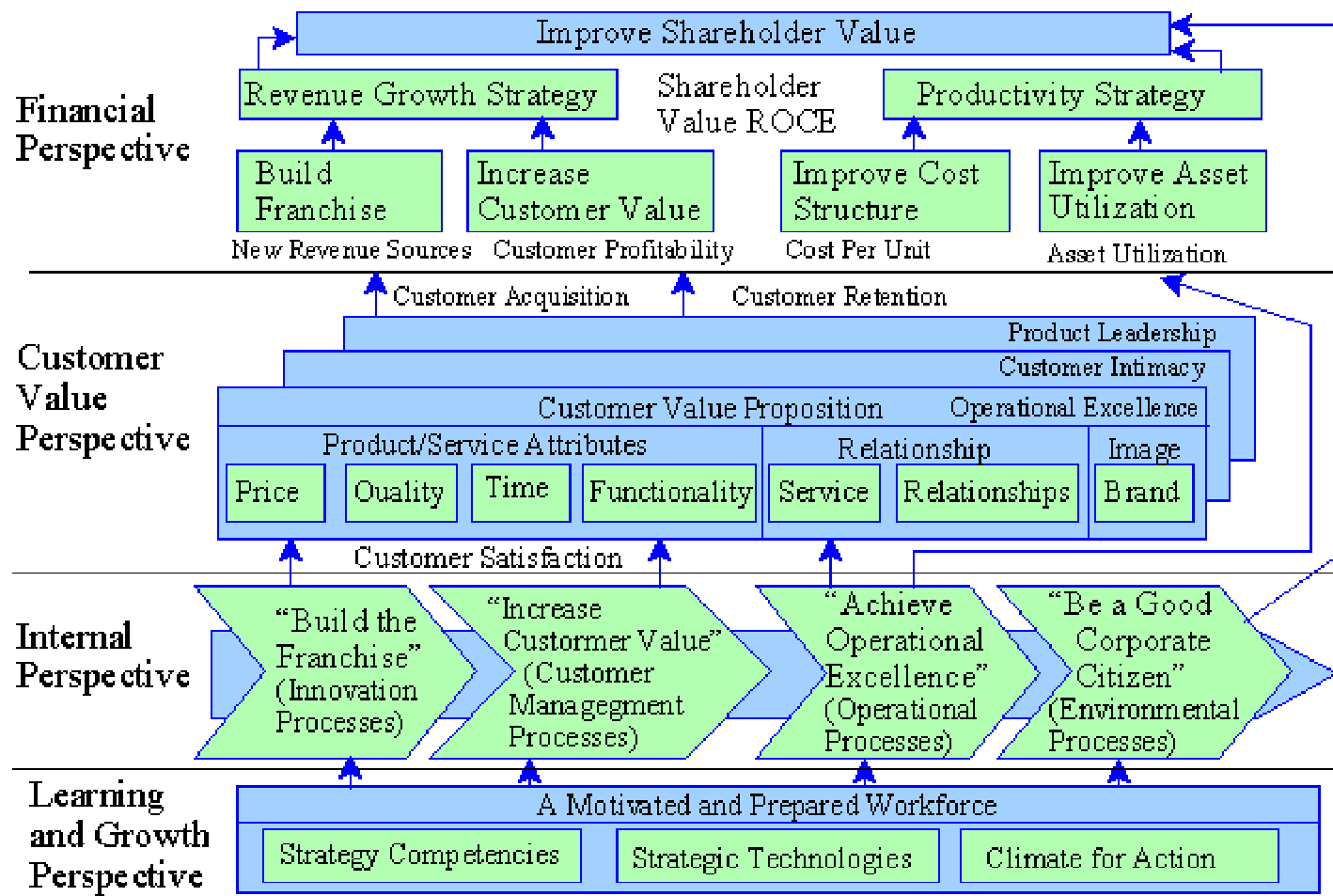
Beautiful integration of uncertainty into other thinking has been the basis of the mathematical approach since before Laplace (1749 – 1827).

But there's still a HUGE practical problem: what if a fully quantified, clearly defined model is just too hard to create right now?

# **Lessons from strategy maps**

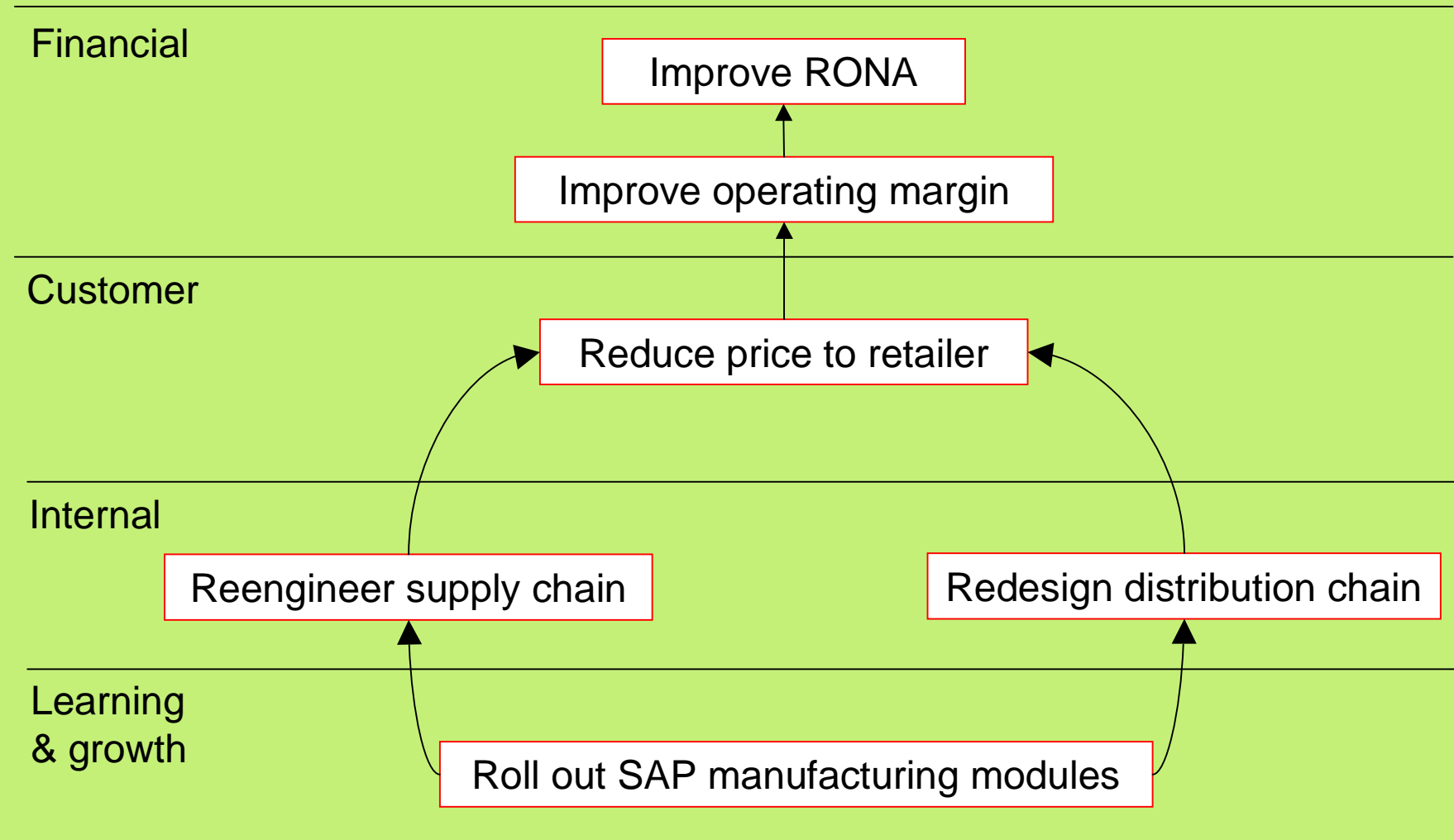
# Balanced Scorecards – strategy maps (aka logic diagrams, rationale, mental model)

The Balanced Scorecard Generic Strategy Map\*



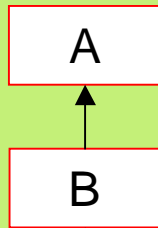
\* Adapted from Kaplan & Norton Figure 3-15 page 96.

# Balanced Scorecards – strategy maps (aka logic diagrams, rationale, mental model)



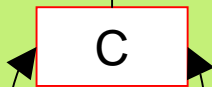
# Balanced Scorecards – strategy maps

Financial



Target	100	105	100	95	105	125	120	115
Act/Fore.	102	105	99	95	104	123	119	105

Customer



Target	60	60	61	62	62	62	63	63
Act/Fore.	47	38	45	50	53	53	43	43

Internal



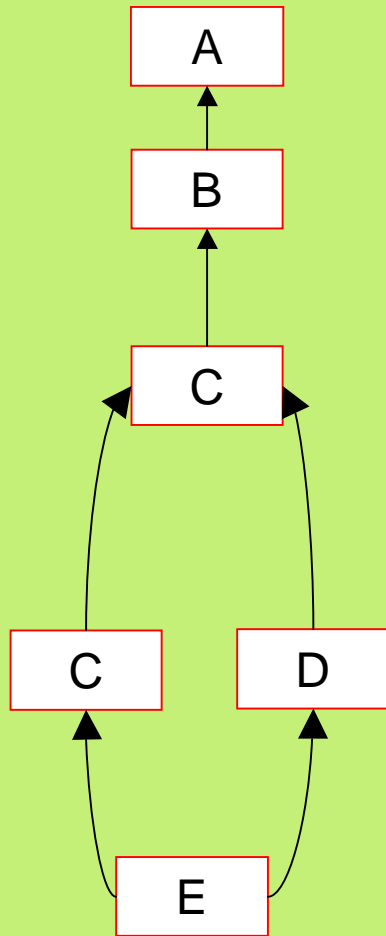
Target	20	23	25	25	23	22	22	20
Act/Fore.	23	24	23	24	24	23	23	22

Learning & growth



Target	5%	5%	6%	7%	7%	7%	8%	8%
Act/Fore.	2%	2%	2%	2%	3%	4%	8%	8%

# Where are the “risks”?



The nodes:

Future numbers

Current numbers

Past numbers

The links:

Future characteristics

Current characteristics

Past characteristics

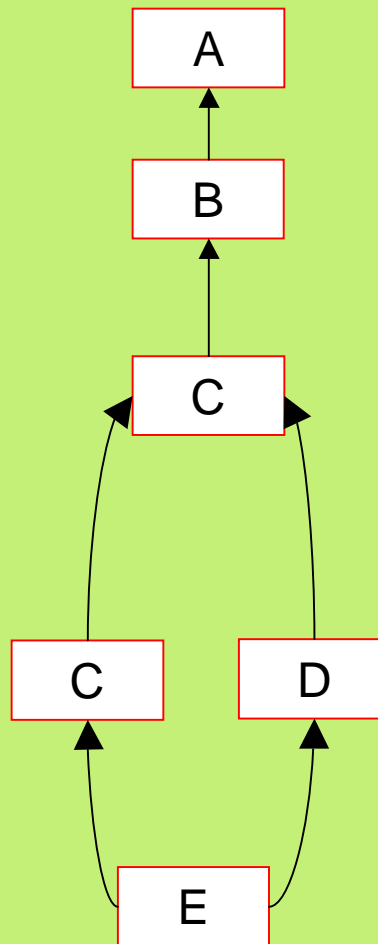
Our values

The structure of the model

# What about a risk workshop?

Strategy Workshop

Critical driver:  
“Availability of  
computer systems.”



Risk Workshop

Risk:  
“Computer systems  
not available for a  
period of time.”

# Key points

- Structurally the same as the mathematical model approach
- But not fully quantified – actually just pockets of quantification usually
- We can ‘read off’ a reasonable set of ‘risks’ from the mental model
- Clarifies meaning of ‘all the risks’; clarifies thinking about ‘impact’

So this fits centuries of mathematical thinking and leading practices in performance management.

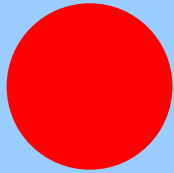
**But is it natural?**

# **Lessons from risk register content**

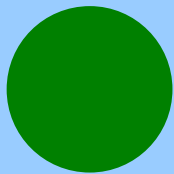
# Study of actual risk register items

- Risk register based risk management often proceeds as if all risk events are:
  - Dramatic
  - All or nothing
- Is this true? Yes (sometimes) and No.
- We must get behind the form of words used to identify the mental model behind the 'risk'

# All-or-nothing “cliff” risks

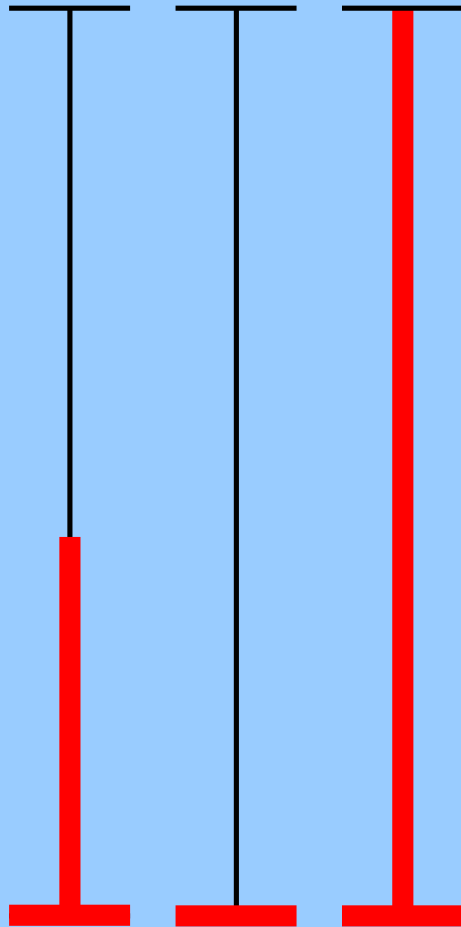


- “The Jury finds us guilty.”
- “We fail to win a license in the Government’s auction.”
- “Our auditors qualify our accounts.”



- “This toss of a coin comes up tails and we lose everything.”

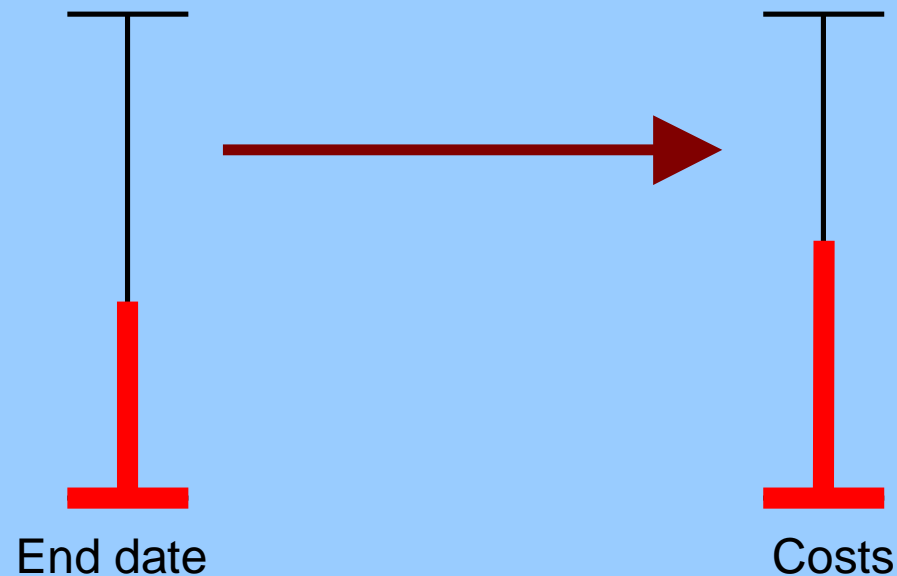
# 'Risks' with scales not cliffs



- “The damages awarded are more than £100,000”
- “The cost of compliance to get a license is excessive.”
- “Our IT systems fail completely.”
- “Our warehouse suffers damage due to bad weather.”

# ‘Risks’ with causal links and scales

- “Delays in completing implementation lead to excessive costs”



# Study of actual risk register items: results

	<b>“Risks”</b>	<b>Complement is a range</b>	<b>Complement is zero</b>	<b>Where at least 75% certain no “cliff”</b>
<b>1*</b>	47	34%	66%	<b>32%</b>
<b>2</b>	10	60%	40%	<b>70%</b>
<b>3</b>	16	100%	0%	<b>81%</b>
<b>4</b>	9	78%	22%	<b>89%</b>
<b>5</b>	12	58%	42%	<b>75%</b>
<b>6</b>	5	40%	60%	<b>40%</b>
<b>7</b>	16	69%	31%	<b>75%</b>
<b>8</b>	7	86%	14%	<b>86%</b>

\* Civil contingencies risk register

# Key points

- Even though people are gently encouraged to think in more dramatic terms...
- ... a huge proportion of risk register items imply a scale and a region or point.
- People think this way naturally.

Can all these threads be pulled together into  
one simple set of ideas?

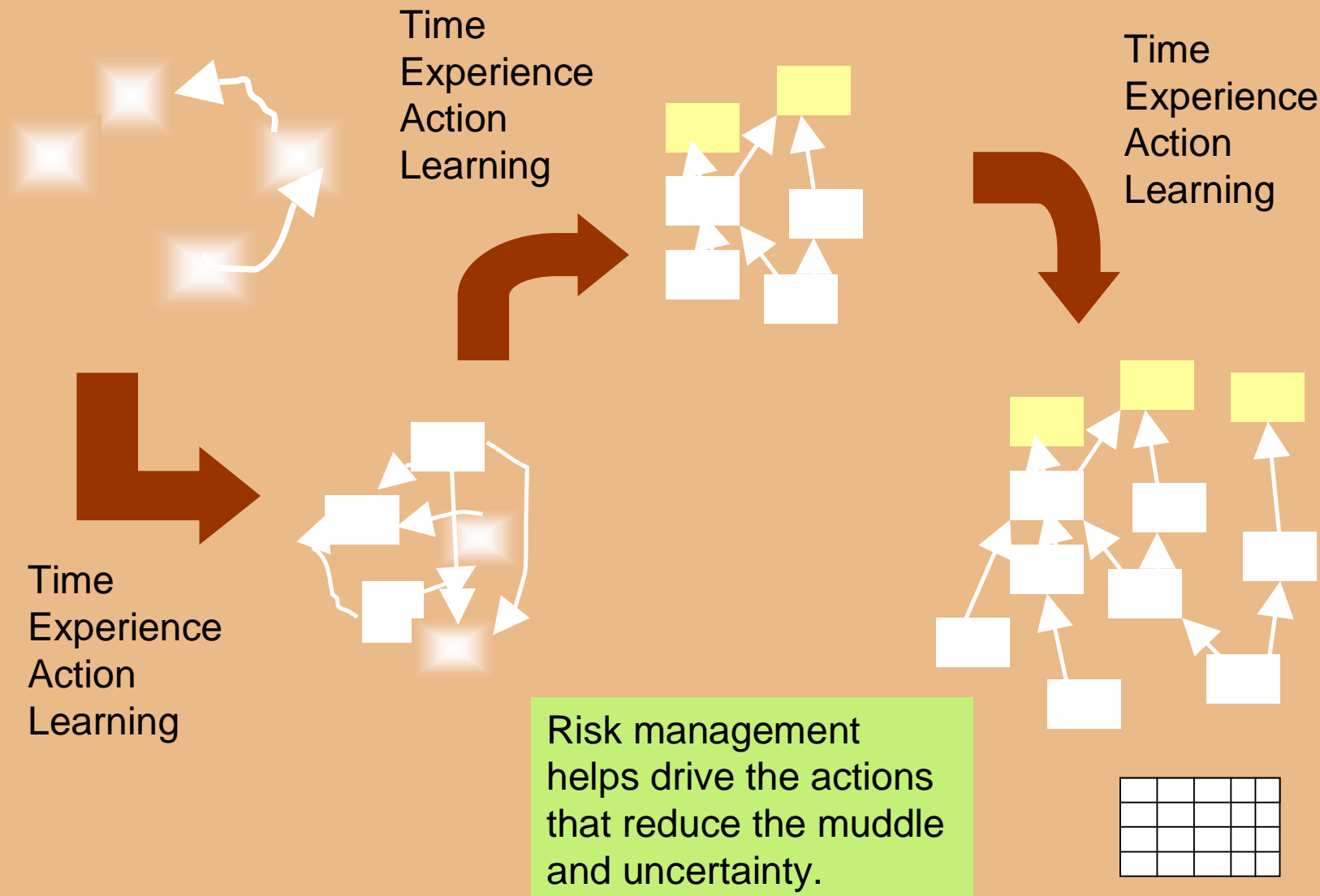
You decide.

# **A prescription**

# First steps

- Waiting for the perfect analysis to be finished is rarely sensible, so...
- ...do these in parallel:
  - Get the obvious plan steps and controls in progress/in place immediately – based on what usually works/what obviously makes sense
  - Get mental model thinking underway that will feed in improvements to the initial plans and controls

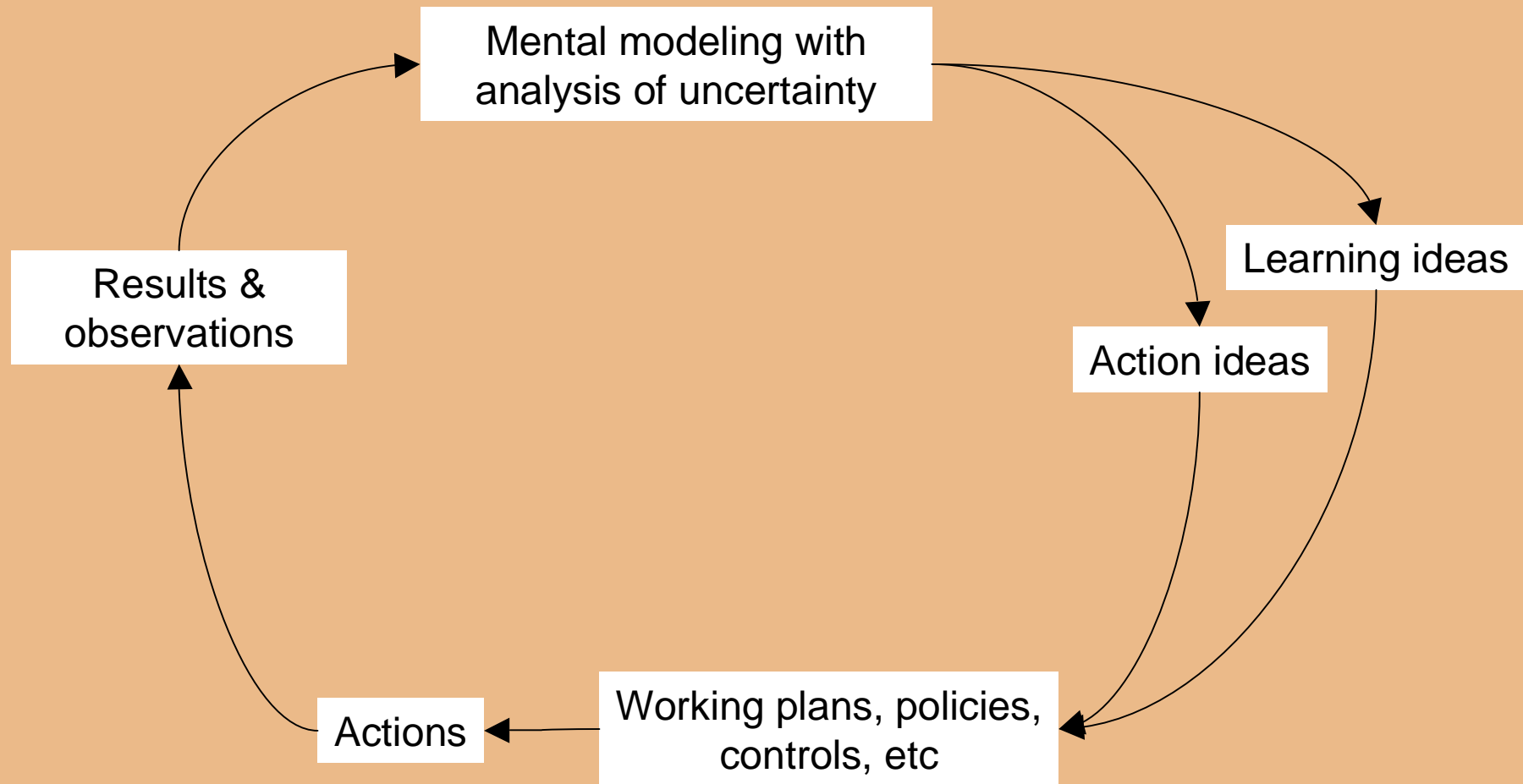
# Mental model progression



# Mental model progression

- What to do:
  - First thoughts will be muddled, unconnected, incomplete, un-quantified, ill-defined (e.g. first draft risk register)
  - Move on from those first thoughts.
  - Keep coming back with slightly more interesting thinking: more connected, less muddled, more complete, better defined, more quantified
- Why progress like this?
  - Impossible to get to great mental model etc in one step
  - Not moving on from first thoughts is frustrating and boring; the flow of insights and actions dries up; people lose interest

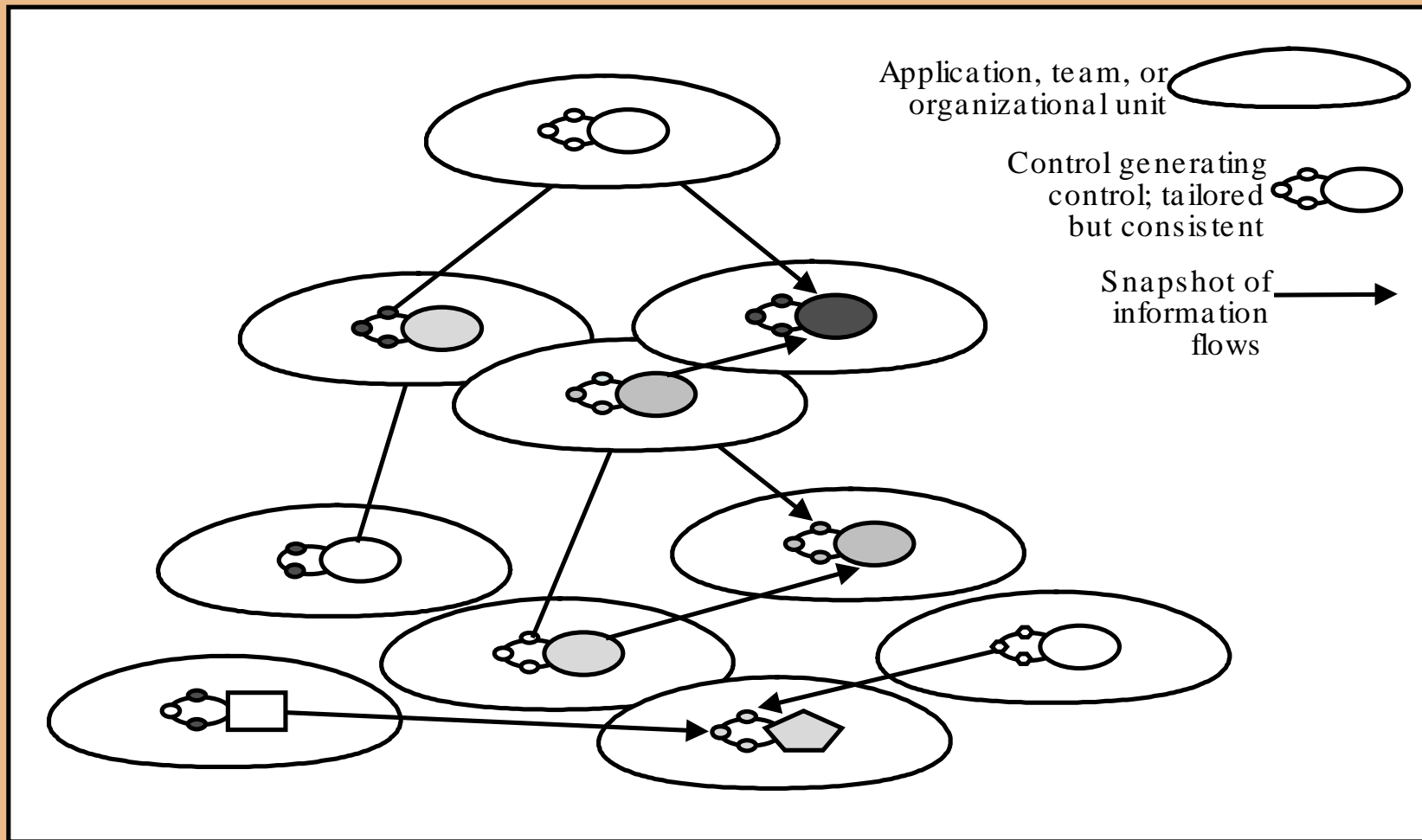
# Flows of insights and actions



# Flows of insights and actions

- What to do:
  - Consider which uncertainties matter most and work on them more
  - ‘Simulate’ in conversation, exploring scenarios and responses
  - Act on good ideas without delay
  - Maintain flow of insights and actions to keep attention and backing
- Why work this way:
  - Awareness of implications of uncertainty drives actions to improve controls/ strategy/ tactics, cover alternative truths, improve KPIs, learn more about how the world really works, improve quantification, develop model(s)
  - Perfection is not needed for useful insights and actions
  - A flow of insights and actions helps motivation

# Multiple perspectives in an organization



# How much of this already happens in your mind and your organization?

Do you have unproven hypotheses about how your world works?

Does life go on despite doubts and confusions?

Does it take more than one meeting to get ideas straightened out?

Do you try to gain from better information and understanding?

Do important uncertainties trigger actions to learn more?

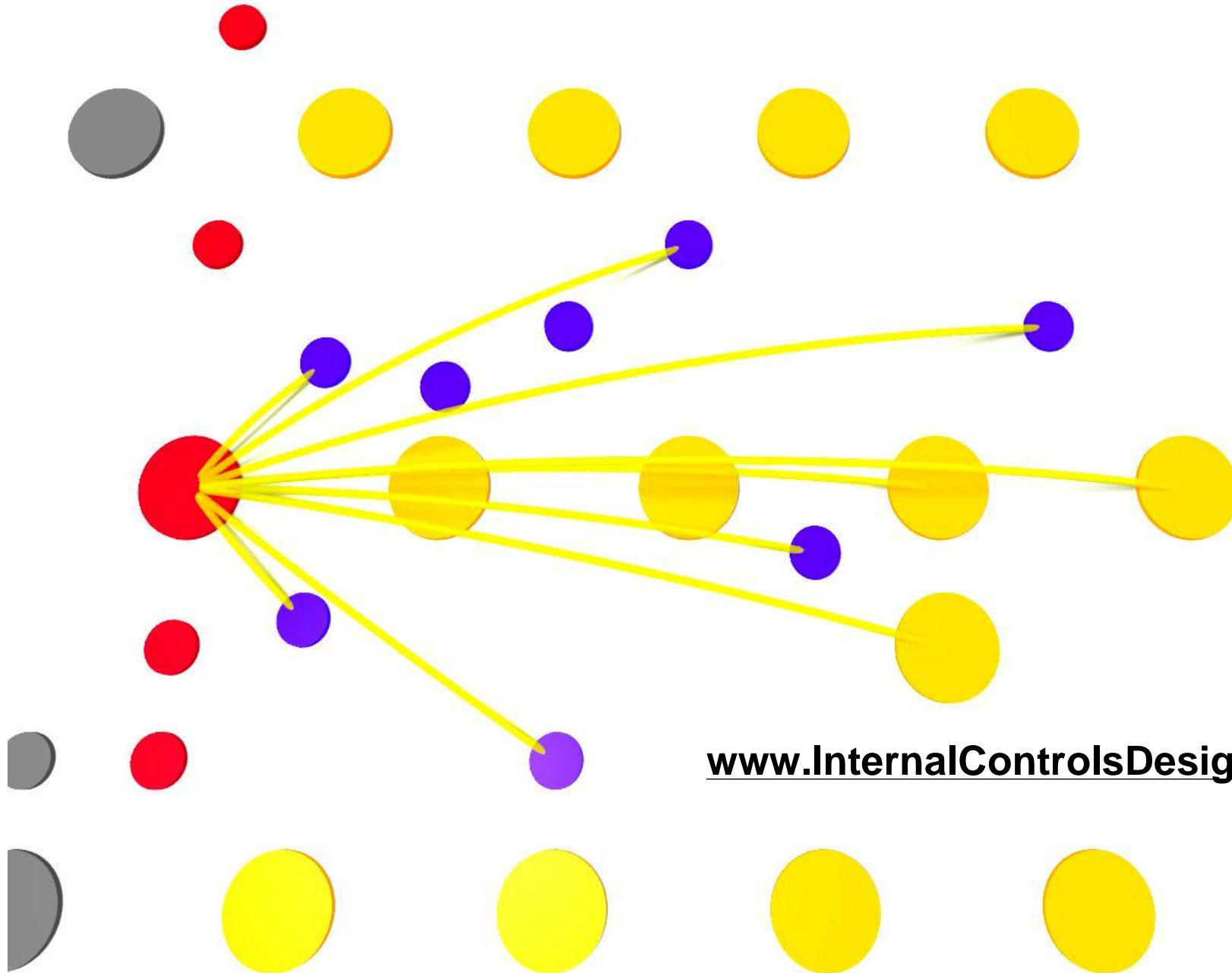
Do you correct plans asap or wait for a perfect replacement?

Do management teams at different levels have their own ways of looking at things?

# Exactly

**So let's guide the management bureaucracy to fit what makes logical sense and is natural.**

**Let risk management emerge at the heart of management thinking by focusing on the uncertainty that lies there.**



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